August 1957 50 cents

PACIFIC FISHERMAN

Chilled Sea Water Saves Fish p27

Pink Shrimp Yield New Fishery ... p41

THE FIRST MILLION POUNDS ARE THE HARDEST, but Washington fishermen were well started in July on their second million pounds of shrimp such as these. (See article on page 41 on this newest Pacific Northwest fishery.)

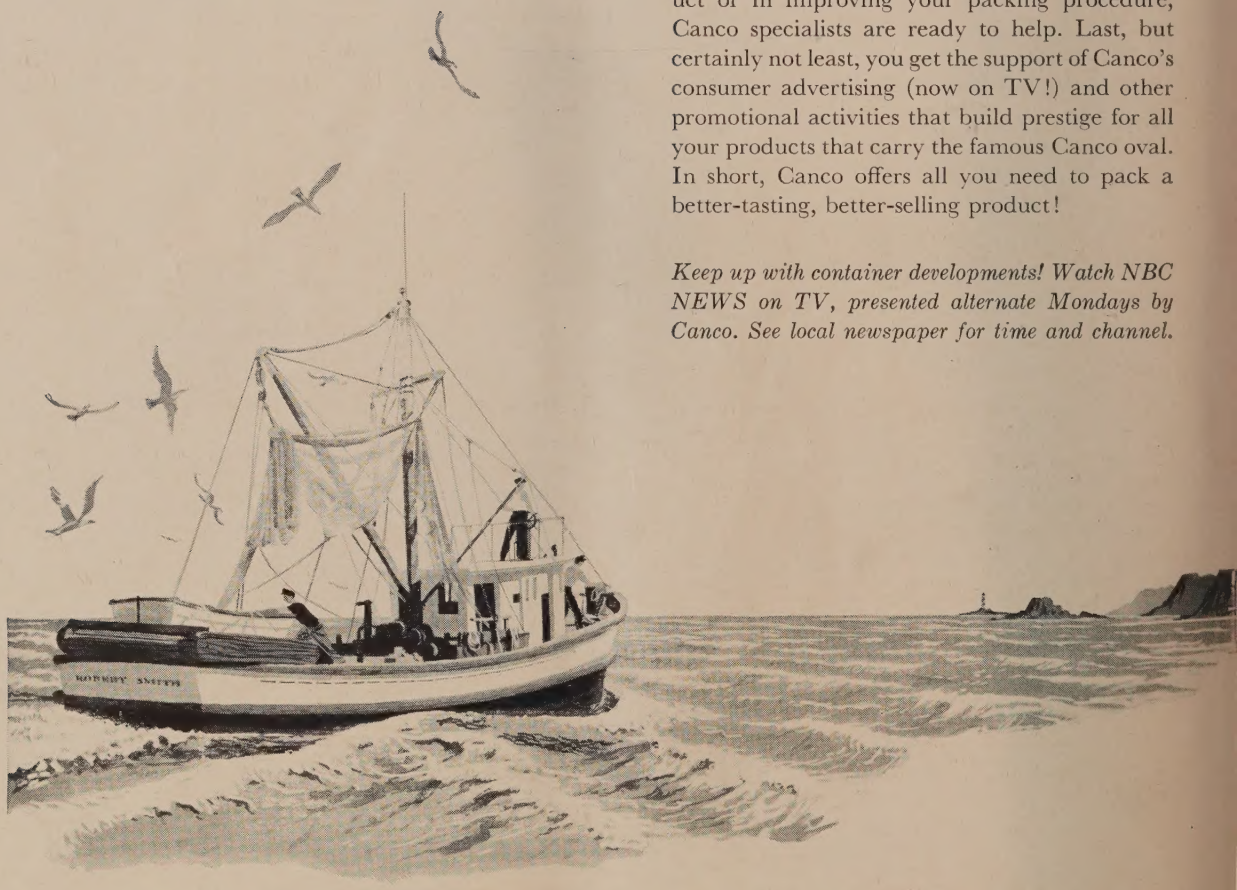
—Photo by Hugh Stratford, Wash. Dept. of Fisheries

A MILLER FREEMAN PUBLICATION

Up and down the coast... CANCO is known for service !

The service you get from Canco starts with a complete line of quality cans for fish products, delivered promptly from a nearby factory. If you need technical assistance in formulating a product or in improving your packing procedure, Canco specialists are ready to help. Last, but certainly not least, you get the support of Canco's consumer advertising (now on TV!) and other promotional activities that build prestige for all your products that carry the famous Canco oval. In short, Canco offers all you need to pack a better-tasting, better-selling product!

Keep up with container developments! Watch NBC NEWS on TV, presented alternate Mondays by Canco. See local newspaper for time and channel.



AMERICAN CAN COMPANY CANCO NEW YORK CHICAGO SAN FRANCISCO

PACIFIC FISHERMAN

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A MILLER FREEMAN PUBLICATION

Big Red Catch Embarasses Japanese

● Big Red Salmon catch of the Japanese high-sea fishing fleet in the North Pacific this season created an unexpected financial strain on some companies, which were obliged to pay the gillnet boat operators in notes or half in cash and half in I.O.Us. Some difficulty in converting the company notes into cash was experienced by the vessel owners and fishermen.

At the same time the Salmon Mothership Council proposed to the Federation of Japan Salmon Fishing Industrial Associations, composed of the owners of the ocean gillnetters, that the 1957 salmon price be re-negotiated because of the weight of the Red catch of 1957 and the possibility that some of it would be carried over.

The boat owners rejected the re-negotiation proposal and demanded that current payments for fish should be made in cash or equivalent negotiables.

Tuna Bucks Living Cost Trend

● Although for 10 consecutive months the official cost of living index has hit a new high each month, Tuna Research Foundation points out that canned tuna is bucking the trend and giving the consumers a bargain, being priced 15% lower than four years ago.

Japanese Seek Stability in Tuna

● Seeking means of stabilizing the landed price of Japanese tuna, and relating it to the export price and demand, the Federation of Japan Tuna and Bonito Fisheries Associations this summer demanded a voice in Japanese tuna export councils.

Hitherto all matters pertaining to the export of tuna have been in the hands of the processors.

The Federation of Associations made two moves: (1) to create within itself an Export Planning Committee; (2) to establish a collective contract between the Federation and the processors—canners and freezers—so far as Albacore is concerned, with Yellowfin to be included later.

Canadian Commissioners Reappointed

● The new government of Canada has reappointed three Canadian members of the International North Pacific Fisheries Commission, J. M. Buchanan, Roger T. Hager, and James Cameron. They were named for two-year terms from June 30, 1957.

The fourth Canadian, George R. Clark, currently is chairman of the commission.

Pacific Oystermen Meet Aug. 15-17

● The 1957 convention of the Pacific Coast Oyster Growers Association will be held at the Bellingham Hotel, Bellingham, Wash., from Aug. 15 through 17.

Can't Sell If We Don't Buy

● MITI, Japan's Ministry of International Trade and Industry, rejected the request of the Japanese salmon industry for negotiations designed to secure an increased permit for shipping 1957 Japanese canned salmon into the United Kingdom, saying:

"Right now Japanese importation of British goods is not in a satisfactory condition. Therefore it is hardly possible for us to seek a one-sided increase in Japanese goods for shipment to Britain".

today's challenge

— there is no magic formula for packing and selling canned salmon.

— many other foods fight for the favor of the housewife and her family.

— to meet this challenge the Industry must produce a product of quality and economy.

— salmon that has the reputation of always being painstakingly packed draws to itself elements of support that are lasting.

PACIFIC AMERICAN FISHERIES, Inc.
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Quality Always

Sales Subsidiary: DEMING & GOULD COMPANY
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A worth-while story about Shell men, techniques and

SHELL ROTELLA OIL

New lease on life

FOR GASOLINE AND DIESEL ENGINES

ENGINES, TOO, can be old before their time. And often the cause is acid action, biggest factor in engine wear.

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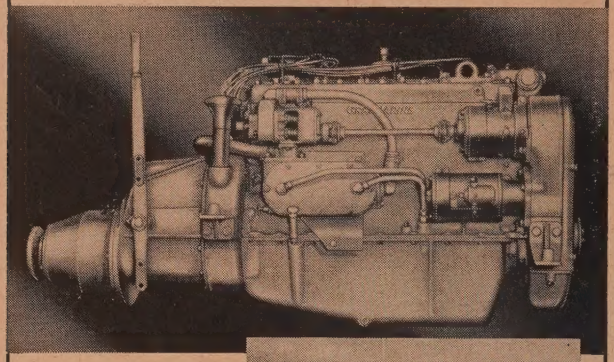
Shell Rotella not only stops acid action, it keeps engines *clean*. A truly balanced oil, it has detergent-dispersant and oxidation-inhibiting properties.

Chances are Shell Rotella or another fine Shell product is the answer to one of your lubrication problems. Developed by Shell's 1500-man Research team, these products are the result of years of Shell lubrication experience. Why not put that experience to work this week?

Ten Years At Hard Labor

AND STILL GOING STRONG



This Engine Can Take It!

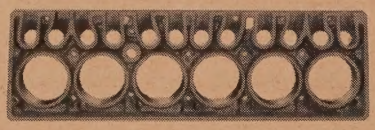
The fishing vessel shown here is owned and operated by Logan M. Edward of Quathiaski Cove, British Columbia. His letter to us said:

"This engine has certainly given me fine service. It was purchased in November of 1946, has been in constant service since then, and has never had a major overhaul other than valve grinding. This engine is a Gray Lugger Six-226 with 2.5:1 reduction. It has never been rehoned and still doesn't burn oil."

LOGAN M. EDWARD

Thank you, Mr. Edward. Your experience confirms the reputation that Graymarine engines have earned in workboat service. The secret of why they last longer is in the heavy-duty cylinder block—hard and close-grained—cast from chrome nickel iron, with water jacketing completely surrounding every cylinder bore. Most other engines do not have this feature, mighty important in marine work. It insures even expansion, keeps cylinders round, reduces piston wear.

Sawed-off section of cylinder block shown below tells the story!



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GRAYMARINE

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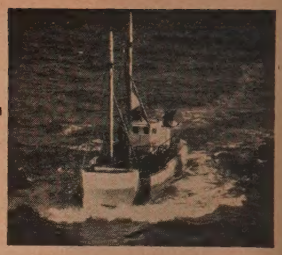

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The oversize dial is ten inches in diameter and there is only one knob for control. Installation is simple—the unit just plugs into any current model Fathometer. (Remember, *Fathometer* depth sounders are made only by Raytheon). It is available for either deep or shallow model Fathometers and can also be installed with other makes of depth sounders.

Successful fishermen use Fathometer depth sounders. The *most* successful fishermen use the profit-making combination of a Fathometer plus the Model 2017 remote indicator. Why not see your Raytheon dealer for full details.

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RAYTHEON *Excellence in Electronics*

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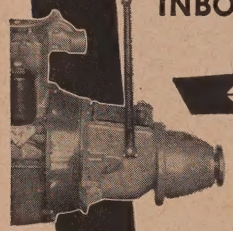
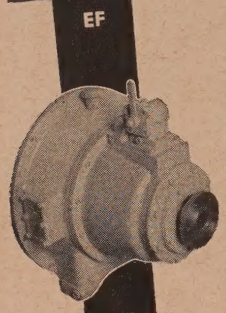


Every ride is a luxury cruise when your craft is equipped with a dependable "Capitol" Gear. You'll discover new ease of handling, greater maneuverability and smoother performance right from the start . . . plus the quality craftsmanship that has made "Capitol" a famous name in marine equipment the world over. Start soon to enjoy a thrilling new adventure in seafaring with a "Capitol" Gear.



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EF REVERSE AND REDUCTION GEAR

Features full 100% reverse. The EF Reverse Gear is made for a lifetime of use. Easy to install, the EF may be used on the Caterpillar D-311, Cadillac 210 h.p., Oldsmobile 88 and 98, Buick V-8, Chev V-8, Pontiac V-8, Ford and Mercury (85 h.p. and up) engines.

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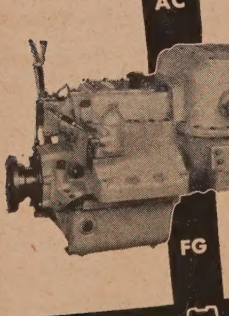
2 HE

2 HE REVERSE AND REDUCTION GEAR

Here is the newest in hydraulically controlled marine gears. World famous for smooth, dependable control, instant response and longer service life. A compact unit, the 2HE features finger-touch control with full forward and full reverse. Can be used on gas engines to 250 h.p. at 4000 RPM and diesel engines 150 h.p. at 3000 RPM. Also available with reduction gear 1½:1; 2:1; 2½:1; 3:1; 4:1.



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Capacity 500 h.p. at 1000 RPM. Reduction ratios of 2:1; 2½:1; 3:1; 3.75:1.

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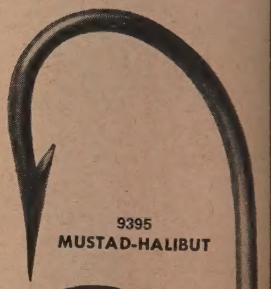

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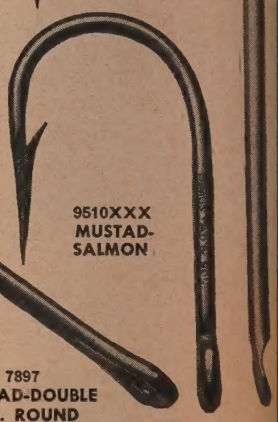

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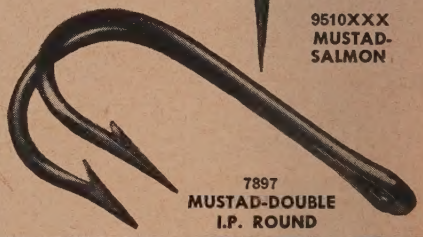

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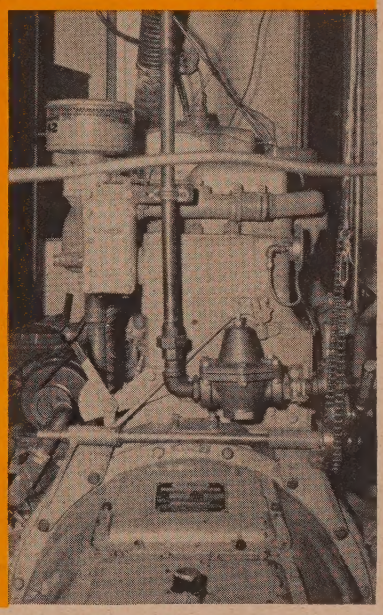

CAT* D342 gives "Patricia Joan" dependable power

Thorvald D. Larsen, of Seattle, calls his *Patricia Joan* just a good all-round fishing boat. She's typical of the big fleet that fishes halibut off the coasts of Washington, British Columbia and Alaska. A 57-footer, with 17-foot beam and 8.8-foot draft, her net tonnage is 17, gross 53. A Caterpillar D342 Engine swings her 48" x 40" wheel through 3:1 reduction gear, and gives her 9 knots speed. Her capacity is about 70,000 pounds of fish.

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Caterpillar Tractor Co., San Francisco, Calif.; Peoria, Ill., U. S. A.

CATERPILLAR*

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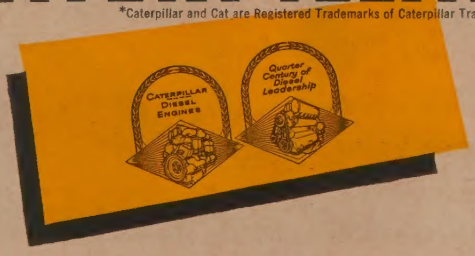
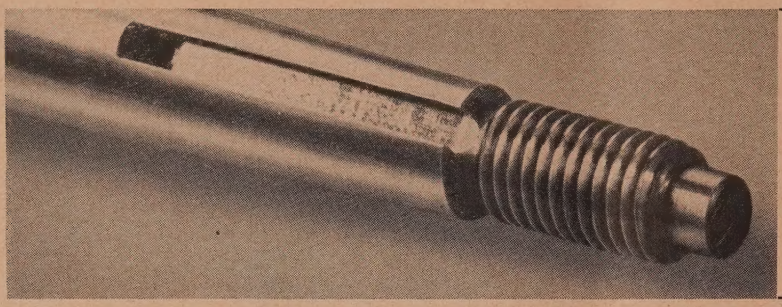


Propeller Shafting of unusual strength



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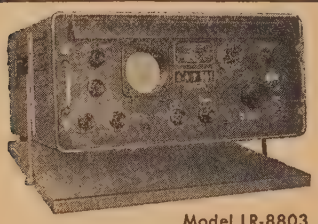

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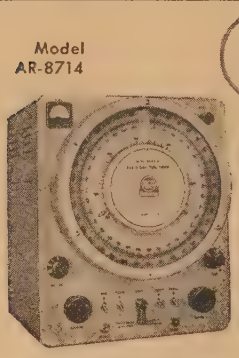
Model AR-8714



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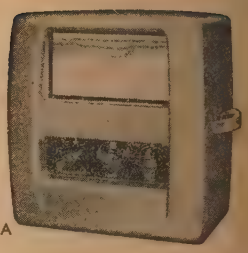

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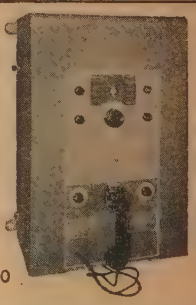

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PACIFIC FISHERMAN AUGUST 1957

DISAPPOINTING —

That in a Word Describes Early 1957 Pacific Salmon Production

Disappointment was the rule roughout the Alaska salmon indus- as this issue came to its presstime.

What promised to be a booming run Reds on Bristol Bay toned-down a before the season ran-out July 24.

The Naknek-Kvichak area — but stly the Kvichak — got a really od pack, within a few thousand ses of that for 1956; and the Egegik d Ugashik did fairly well. The ushagak, however again was a bitter sappointment.

Despite some early declarations— dently based less on facts than on desire to influence the fishing reg- ations—the good Kvichak *run* was *where near as good as last year.*

True, *pack* was near 1956, but e escapement was far short, certainly ss than half. Early appraisal of the awning escapement puts it at 3 to million fish, against around 9 mil- n last year.

However, this gives no cause for arm, as 3 to 4 million spawners on e Kvichak probably provide an en- ely adequate seeding; and perhaps e to be preferred to a 9-million capement from the biological as well the economic point of view.

In any case, there appears reason- ly certainty that the 1957 regula- ns on the Kvichak at least operated a way to permit the industry to ke as much fish as was consistent ith sound provision for the future.

The Red run to the North Penin- la stream was weak and the pack efully small.

South Peninsula and Chignik Red oduction was running well below evious years, 1956 and cycle year well.

Inevitably, there will many earnest en who will see a grim correlation tween the acutely disappointing Red salmon run to the Alaska home streams and the astonishing catch of Red salmon by the Japanese on the high seas—actually by far the largest they have made since they initiated this pelagic fishery.

Early Stuart Sockeyes Yield Disappointing Catch

● Sockeye fishing in boundary waters to presstime had been keenly disappointing.

This was due in large degree to the poor results gotten from the Early Stuart run, which in the 1953 cycle year was excellent.

Several factors worked together to bring about this disappointment:

1. The fish were very small, *averaging* 5.5 lbs. against a normal average of 5.7.

2. They didn't tarry, but went upstream as though they had business there. This urgency took them through much of the fishery—notably that in Canadian waters—during one of the extended periods of closure being applied this season to provide the adequate escapement demanded by the international treaty in a year when the amount of gear mounted for the

Pinks Hitting the Hooks Hard

● Pink salmon were being delivered by trollers at Seattle and Astoria all through the month of July, and in unusual volume.

At presstime records of the troll salmon exchanges in Seattle showed more than 100,000 lbs. of Pinks had been sold since they first started to show in the troll catches late in June. The price was firm at 21c.

Trollers generally were under the impression that for some entirely obscure reason Pinks are taking the trolls much more actively than they did some years ago. In fact, in the odd-numbered years Pinks have come to be a definite part of the troll catch landed in Puget Sound.

The small "kelpers" fishing out of Neah Bay account for a large part of the Pinks being landed, as they find it profitable at 21c to fish for them close along the shore. After all, Silvers were only bringing 28c, and you have to go further and fish harder for them.

At Astoria Pinks were being landed up to 1,000 lbs. per day, most of them taken along the Oregon beaches south of the Columbia.

● What is responsible for the apparent step-up in Pink salmon catches by trollers?

What do the unusually heavy landings on Puget Sound foretell for the inside Pink run?

If you can answer those questions you deserve a place with the Major Prophets.

Sockeye-Pink fishery is the largest ever known.

3. Small size of the Early Stuart Sockeyes reacted sharply against the gillnets. Actually, this gear—usually so effective—took a beating up to the middle of July at least. With Sockeyes averaging only 5.5 lbs., this meant that a lot of the fish were too small to gill.

4. Finally, the Early Stuart run of 1957 followed the trend which has been manifest in a number of the more important races of the Fraser run in the past few years. It just didn't maintain the upward trend which prevailed for several cycles before the onset of the period of "declining productivity", as the biologists say, in which we now are caught.

Columbia River Middle Season Shows Decline

● The favorable conditions which prevailed on the Columbia River during the first season of the year slipped into reverse during the June-July open fishing period, when the catch was scant and well below that of 1956 for this opening.

The middle river grounds reported relatively better production in June and July than did either the lower or upper river fisheries.

Troll fishing generally was excellent in July off the Oregon coast.

Lure of Albacore Diverts Trollers from Silvers

● Silver salmon fishing was pretty good on the North Coast at the end of July, but not so good that a lot of boats didn't switch gear to Albacore jigs and head for Southern Oregon when the first boats delivered at Astoria and Newport.

Landings ran from four tons to about 7.3 tons per boat, and the fleet's fever shot up like that of a small boy with the measles.

To get 7.3 tons of Albacore off the Oregon coast before the end of July was pretty good, reminiscent of 1944.

The Silvers were showing in volume all the way from Southern Oregon to Cape Scott, and commanding 28c, Seattle.

King salmon deliveries at Seattle held up fairly well also, but the gross deliveries of Silvers at the end of July were crowding close on Kings of all grades.

Pink Salmon Protocol Signed in Ottawa

The first international agreement signed by the new Diefenbaker government at Ottawa was the pact between Canada and the United States for the regulation and sharing of the Pink salmon catch of boundary waters.

Hon. J. Angus MacLean, Canada's new minister of fisheries, is preparing to visit British Columbia, where he attended university, as soon as his new duties in Ottawa permit. He is now a Prince Edward Islander, a community where fisheries are paramount, although he personally is a farmer. He succeeds James Sinclair of British Columbia, who lost cabinet rank when the Liberal government was defeated, although he personally was re-elected to parliament.

Although Canada's new Minister of Fisheries Angus MacLean was present at the ceremony, the actual signing was by new Minister of Justice Davie Fulton, a British Columbian whose home (Kamloops) is near the salmon-rich Fraser's principal spawning grounds, and U. S. Ambassador Livingston Merchant.

Under the agreement, the Pink catch in boundary waters will be divided equally "so far as practicable" between the U. S. and Canada between fishermen of the two countries. The international commission which administers the Sockeye fishery will have responsibility for the Pink salmon also.

George Clark Holds Canadian Fishery Post

Defeat of the Liberal government in Canada and formation of a Conservative cabinet under new Prime Minister John Diefenbaker, will not necessarily be followed by the changes in department personnel that an equivalent political upset would have in the U. S. For instance, George Clark will continue as deputy minister and, while it is conceivable that new appointments will be made, the fact that the new minister is a newcomer to the industry will probably influence him in retaining his subordinates with a long period of practical service.

Nor will the change in administration at Ottawa have any effect on the various international commitments of the Canadian government respecting fisheries. The so-called Pink treaty, for instance, was unanimously passed in the Canadian parliament, and generally speaking Canadian legislators have been non-partisan in their attitude towards fisheries.

James Sinclair, while no longer minister of fisheries, doesn't plan to forget the subject during his term as a private member of the House of Commons. For one thing, he intends to go whaling off the Pacific coast this summer. He went out with one of the B. C. Packers' whaling boats a couple of years ago and enjoyed the experience so much that he is determined to go again and, if possible, harpoon a whale himself.

U. S. and Canada Study Bonilla-Tatoosh Area

Canada's new minister of fisheries, Hon Angus MacLean of Charlottetown, Prince Edward Island, lost no time in swinging into action following the political turnover in early June, and one of his official acts was to authorize Canadian participation in the survey being undertaken jointly with the U. S. to determine the extent of salmon stocks inside the provisional boundary line from Bonilla Point to Tatoosh.

The boundary was established tentatively in connection with offshore salmon fishing restrictions, although the U. S. has been in favor of a different boundary. It had been arranged to review the situation two years from now and come to a more permanent agreement then. Meantime a U. S. drum seiner has been carrying out exploratory work on both sides of the international border, with a Canadian scientist on board while in Canadian waters, and a Canadian vessel will operate in similar fashion a little later.

It was to give formal sanction to this plan that the new Canadian minister pushed an order through the new cabinet. It is expected that A. J. Whitmore, chief supervisor of fisheries, and other top men in the department and in the Fisheries Research Board will confer with Mr. MacLean in Ottawa shortly, and Mr. MacLean is known to be looking forward to a visit to British Columbia fisheries.

Mr. MacLean, 43, is without experience in the fishing industry, his occupation being officially described as "farmer". But being a "maritimer" he has been reasonably familiar with the problems of the commercial fishermen.

Southern California Domestic Tuna Deliveries

Cumulative totals for 1957 through July 6, in tons, as reported by U.S. Market News Service.

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito and Yellowtail	Total
pers and Albacore fleet	793	..	17,880	33,089	..	793
se Seiners	..	1,568	997	13,438	..	16,003
al 1957 through June 20	793	1,568	18,877	46,527	..	66,972
al 1956	995	1,401	28,769	51,758	41	81,969
al 1955	1,070	871	26,883	28,332	..	56,086

una Price Picketing nuts Plant One Day

When crew members of the *Lucy n* refused to accept a $20 price re- ction to $240 late last month for eir 25 tons of Bluefin, members of e AFL-CIO Seine and Line Union cketed the boat and in the process at down the Star-Kist cannery at rminal Island.

Refusing to cross the picket line; hich ran across Star-Kist gates, ap- oximately 800 cannery workers idled e cannery for a day.

With 400 tons of tuna on the prem- s in danger of spoiling, the cannery ade a settlement with the crew of e *Lucy Ann* and pickets were with- awn.

Ten other boats with 1,500 tons of xed tuna were delayed a day in un- ading because of the shut-down.

Pickets on the dock stated that eir union had not instructed can- ry workers not to cross the picket e, but that they had acted as indi- duals in not crossing it.

Star-Kist, Van Camp, Cal-Marine d Pan-Pacific canneries stood firm the new price of Bluefin and the llowing day were paying $240 per n.

auley Processes Suspend pecialized Tuna Canning

Pauley Processes, Inc., Grover City, alif., near San Luis Obispo, is closing tuna cannery after a year and a lf of operations, according to Elton gnazzini, president.

Tuna was packed by Pauley Pro- sses, Inc., under a patent process, herein the loins were prepared be- re cooking, instead of baking the ole fish. Advantages were claimed r yield, texture, flavor and color.

Mr. Tognazzini said that due to her interests he had little time to end fish canning, with all the rami- cations of fish buying and market- g. He said that he felt that they d proved the value of the process the Gover City plant, which he id was more in the nature of a lot plant, and that he hoped to in- est other parties in the process. He id there were no immediate plans r dismantling the cannery.

Tagged California Albacore Recaptured Off Japan

A definite relationship between Albacore caught off the California coast and those caught off Japan has been demonstrated for the third time in the past four years.

The Tohoku Regional Fisheries Research Laboratory in Japan has just notified the California State Fisheries Laboratory at Terminal Island that an Albacore tagged and released by California state marine biologists on Sept. 3, 1956, off Monterey was caught by Japanese fishermen on June 1, 1957, approximately 145 miles east of Tokyo.

During the nine months in which it carried a California spaghetti type plastic tag the Albacore had traveled at least 4,600 miles and gained 4½ lbs. in weight.

reported in Tokyo, are:

Nanyo Gyogyo K.K., Tokyo;

Daiichi Bussan K.K., Tokyo;

Washington Fish & Oyster Co., San Francisco;

D. J. Gubbay & Co., Espiritu Santo Island, New Hebrides.

Name of the company they have formed is: Minami Taiheiyo Gyogyo K.K., which translates: Southern Pacific Fisheries Co., Ltd.

Construction of the base is reported under way at the tip of the Pariklow Peninsula, located in the southeastern part of Espiritu Santo Island, largest of the New Hebrides, which are a condominium of Great Britain and France.

Albacore and Skipjack Abundant near Japan

All through the early summer weeks there were execellent landings of Albacore from waters near Japan, with heavy landings all along the central coast of Honshu.

At the same time fishing for Skipjack was very active, with exceptionally heavy July landings of Skipjack at such ports as Ishinomaki, Kesennuman and Yaizu, the latter port receiving a record total of 500 tons in a single day.

California Imports of Frozen Tuna

Cumulative data in tons for 1957 through July 6, and for other years to the closest comparable date. Data from U.S. Market News Service.

	Albacore	Skipjack	Yellowfin	Unclassified	Total
San Francisco	1,713		2,939	..	4,652
San Pedro	8,238	5,777	8,243	..	22,258
San Diego		777	853	105	1,735
Total, Jan. to July 6, 1957	9,951	6,554	12,035	105	28,645
Total 1956	6,569	4,141	16,990	81	27,781
Total 1955	13,636	5,562	11,566	91	30,855

Magdalena Bay Fish Plant Is Authorized

Mexico has granted permission to a Mexican firm to establish a plant for fishery products at Punta Arena in Magdalena Bay, Lower California. The minimum investment must be US $16,000, of which US $9,600 must be spent on the plant and machinery.

It is understood that this is to be a small operation that will can some fish and abalone, but specialize mostly on freezing spiny lobsters.

New Hebrides Tuna Base To be Active in Fall

October activity is scheduled for the New Hebrides tuna base where four companies, two Japanese, British and American, will cooperate in developing a fishing, freezing and shipping enterprise.

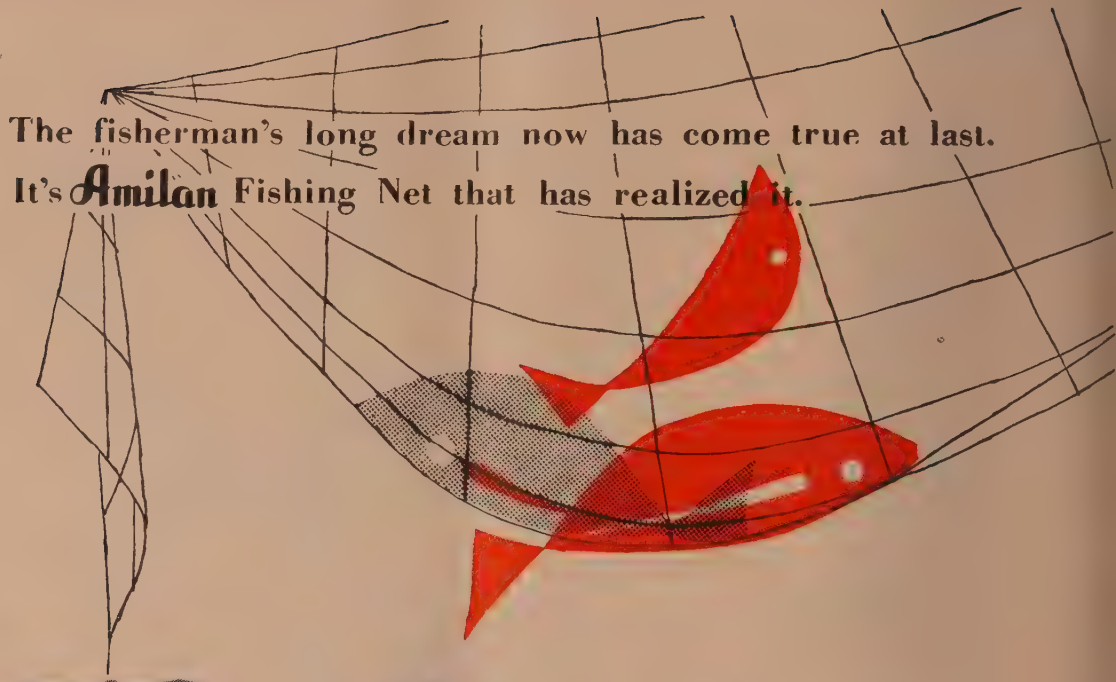
The four interested companies, as

Two Tons of Sardines Taken Near Monterey

Two tons of sardines were landed at the Santa Cruz Canning Co., Moss Landing, Calif., July 8, but no one in the Monterey Bay area seemed to think that this was a sign that sardines were back in central California waters.

The fish were brought in by three boats. They were the first sardines caught in Monterey Bay since 1952, according to Joe Olivieri, manager of Santa Cruz Canning Co., and they were sold for bait. They were from seven to eight years old Mr. Olivieri said, which would make them the class of 1949 or 1950. A few sardines were also caught in the Bay during June.

Standard Fisheries, Inc., San Francisco, has rearranged its office space and made more room for its mild curing department.



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6. Continual fishing operation is possible with no fear of decay.

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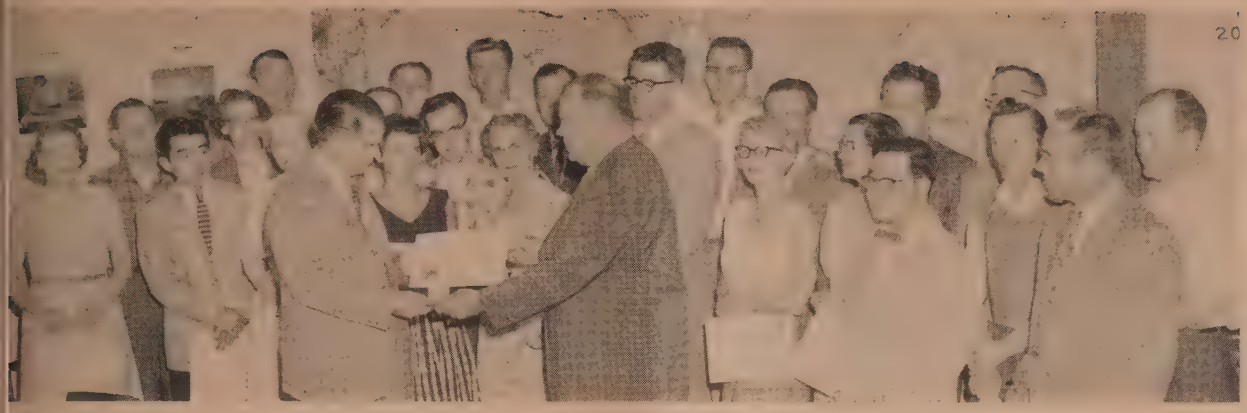


For Once Those Who Actually Do the Work Get Some of the Credit

Members of the research staff of the Bureau of Commercial Fisheries acific Salmon Investigations who participated in the Department f the Interior unit citation "for research achievements which did nuch to sustain the prestige of the United States."

In the foreground, Arnie J. Suomela, commissioner, presents the itation and silver medal to Clinton E. Atkinson, chief. Behind, holding heir individual citations, from left to right: Miss A. Herold, George lusser, Takashi Miyahara, Mrs. M. Roesler, Tom Duncan, Miss L. nderson, Jos. Uzmann (obscured), Ken Mosher, Mrs. S. Gillis, Don Vorland, Jack Lalanne, Mrs. A. Gates, C. J. Burner, M. G. Hanavan, . Hajny, Mrs. M. Whitenock, P. Macy, Miss V. Coleman, S. Murai (in front), G. Ridgway, B. Lander (partly obscured), M. Beam, R. Fredin, R. Anas.

The unit citation from the Secretary of the Interior was awarded in connect with the research team's work in connection with the preparation on the scientific report and data submitted by the American Section of the International North Pacific Fisheries Commission. Other members of the staff who received individual citations, but were in the field at the time the award was made July 19 are: Fred C. Cleaver, Mrs. Mabel Casterlin, Frank Fukukhara, Clifford Fiscus, Mrs. Barythe Long, Clifford Long, Al Peterson, Mrs. Ruth Schallert, Mrs. Dorothy Cox, Miss Alice Hanson, Mrs. Edith Wells, Lorry Nakatsu, George Tanonaka, and George Klontz.

Japanese Win a Beachhead In the Fisheries of Cuba

Fundamental fact behind the con-act signed by one of Japan's largest shing concerns with the government f Cuba is found in the final sentence f the official United States announcement of this newest move in Japan's ccelerating expansion into strategic sheries throughout the world. It says: *"The Japanese basically wish to land heir catch in Cuba and sell to Puerto ico and possibly the United States."*

The deal with the Cuban government was negotiated by Pesqueras Internationales, S.A., representative in hat country of Nippon Reizo K.K., he great refrigeration and fishing ompany of Japan, which recently arted manufacturing tuna specialties n Boston through a subsidiary company. (See article Page 00)

Contract is said to run for one ear, in which the Japanese will oper-te tuna clippers from Cuba with Cu-an observers. If commercial fishing ppears feasible, the Japanese will be equired to train Cubans to man the essels. Landings of fish would not e permitted to compete with those of he national Cuban fleet, unless the uban tuna canning industry needs nd requests supplies.

Landings generally would be frozen, ored and exported. Contract calls for onstruction of a large refrigeration plant, possibly at Cienfuegos.

It is said that a 20% fee would be charged against the Japanese catch and paid to the Cuban National Fisheries Institute, the official U. S. announcement says: "ostensibly as a 'contribution,' but actually for fishing rights.

● Cuba already has a minor tuna fishery supplied by its nationals; and several Cuban canneries are engaged in packing tuna. It is known that they on occasion have been interested in shipping fresh or frozen tuna surplus to the several small canneries operating in the Gulf States.

Nippon Reizo K.K. is a leading industrial element in the Japanese fisheries. It operates some 90 cold storage plants of various sizes in Japan, and is an active factor in export trading in frozen fish. The company contracts to deliver tuna to American Samoa, and is managed by S. Matsuzaki.

Chile Approves Whaling Station by Japanese

A Japanese firm has been authorized to establish a new whaling factory at Corral, Chile, by the Chilean Ministry of Economy. It is believed that the Chilean Government may authorize the foreign investment to reach the equivalent of U.S. $1.2 Million.

How Destructive are Tanglenets?

● Scrutiny of the destructiveness of King crab tanglenets as their operation pertains to female and undersized crabs was urged upon the U.S. federal Departments of State and the Interior by Senator Warren Magnuson of Washington.

He advocated study of the effect of tanglenet gear by qualified, practical fishermen in order that damage done by the gear beyond its legitimate employment in the catching of mature male crabs could be fully appraised.

The senator pointed out the implied question raised by American fishermen as to the propriety of permitting sale in the United States markets of crabs caught in competition with American fishermen by means denied to them as unduly destructive.

Biological aspects of the North Pacific and Bering Sea King crab fishery are under study by the United States and Japan as a part of the undertakings in research sponsored by the International North Pacific Fisheries Commission. However, these investigations sponsored by the commission are not believed to extend to the matter of appraising the destructiveness of gear employed.

Saving Time, Muscle, Men And Fish on Bristol Bay

• Elimination of time-loss in unloading to as large a degree as possible is one of the primary present objectives of Bristol Bay salmon operators and fishermen, for every hour of fishing in a week which may be less than two days long carries a big load of importance.

Furtherance of this move for profits through reduction in time lost to fishing led to the development of an interesting item of vessel equipment this season by Marine Construction & Design Co., Seattle, and its installation aboard three Bristol Bay power scows of the Alaska Packers Association—the *Narwhale, Orca* and *Blackfish.*

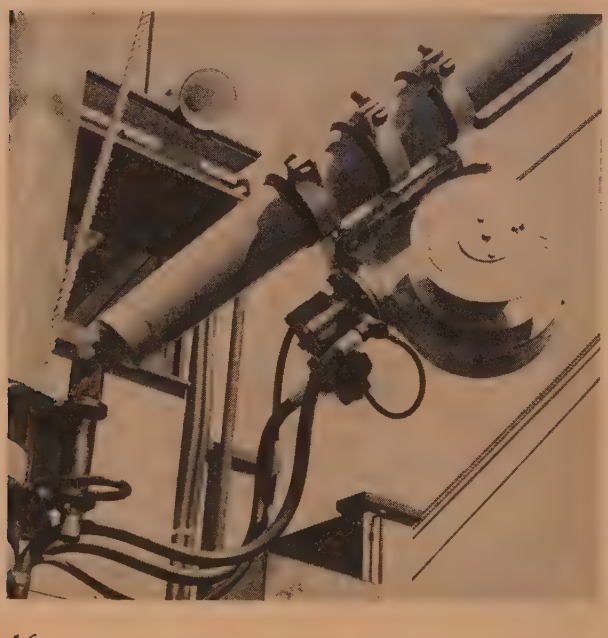
This new gear, currently being tested in actual operations, is a special hydraulic boom winch designed to permit gillnetters to discharge without the slow and man-tiring task of pitching fish from boat to scow. The gillnet boat's two men get their fish into basket, and the boom does the rest. They get back to fishing quicker, and without being "bushed" by the hard work of pitching salmon high. There's a potential saving in fish and fish quality also.

Because of the need for conserving deck space on power scows and small commercial vessels of all kinds, the Marco winch was designed for boom-mounting, while hydraulic drive was selected because of the ease and low cost of installation, flexibility of control, and safety features.

The Marco hoists use Vickers hydraulic pumps and motors, and is controlled through a single hydraulic valve. Raising the handle lifts the load; depressing the lever lowers degree of movement of the valve re ulates the speed; neutral is braki position, and when the handle is neutral the load remains safely su pended.

Safety features include: load is he in event of power failure; control lev goes into braking position automa cally when released; jerk in starti a heavy lift is prevented.

Hydraulic boom winches such those supplied for the Alaska Packe Association power scows are built a range of direct line pull lift fro 2,000 to 10,000 lbs., and with lin speeds from 0 to 150' per minu



Accompanying sketch shows how the hoists were installed to permit two gillnetters to discharge simultaneously, the fishermen loading their fish into brails, and being relieved of the necessity of pitching their catch up onto the scow. Saves time, men and fish.

Marco hydraulic boom hoist installed on an Alaska Packers Association power scow for Bristol Bay service.

Marine Construction and Design C has had long experience in applyi hydraulic power to fishing and de gear, and builds Puretic power block purse, anchor and topping winche seine and gillnet reels and steeri gear all using this type of powe application.

• For use in connection with t Marco hoists on the A. P. A. sco interesting brails were devised. The consist of a rope mesh bag, closed the bottom with a Canadian brailin release. The upper half of the bra is supported by a welded steel fram which permits it to receive a substa tial quantity of fish while seated the gillnet boat.

In practice, fish are tallied into t brail, which is then raised by powe lowered into the fish bin, and the sa mon released easily and witho damage.

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Milo Moore Is Named Director Of Washington Fisheries Dept.

Milo Moore, who was Washington state director of fisheries from 1945 to 1949, in July was appointed once more to the position by Governor Rosellini, thus ending the interim period of nearly seven months during which the department has functioned under Milo Bell as acting director.

Mr. Moore for some time has served as fisheries consultant for the U.S. Senate Committee on Interstate and Foreign Commerce, of which Senator Warren G. Magnuson of Washington is chairman.

From 1950 for a number of years Mr. Moore served the United Nations and the International Cooperation Administration as a fisheries advisor overseas, notably in Greece and Korea, Japan, Okinawa and Hongkong.

While serving as director before, Mr. Moore was a member of the International Pacific Fishmon Fisheries Commission, and he is expected to be reappointed to this position shortly.

He automatically becomes the State of Washington member of the Pacific Marine Fisheries Commission; and is expected to be appointed to the advisory Committee of the International North Pacific Fisheries Commission.

MILO MOORE

who was appointed in July director of the Washington Department of Fisheries, a post he held for four years from 1945 to 1949.

Mr. Moore's background is that of a commercial fisherman and fish buyer at La Conner, Wash., where he made his home before taking up his residence in Seattle.

Mr. Moore entered on his new duties July 22, and almost immediately thereafter the two top administrative men in the department announced their resignations, "clearing the decks for the new regime."

The men resigning were Milo Bell, technical coordinator since 1951 and acting director since the first of the year, and Donald O. Gooding, administrative assistant for six years.

Honest Injuns Required Under New Fishing Rule

● Understanding with three tribes for regulation of Indian fishing at usual and accustomed fishing places on the Columbia River below The Dalles dam, by the Oregon fish commission and Washington department of fisheries, provides:

Dip netting for salmon will be permitted below The Dalles dam in 1957, but other forms of fishing will not.

Commercial dip netting in the area will be permitted only during the times when it is lawful to fish commercially in the main Columbia River below Bonneville dam.

Subsistence dip netting will be permitted during commercial closures, but not for sale to tourists or others. Storage of fish taken during subsistence fishing periods for sale during commercial open seasons will be prohibited.

The tribal organizations will cooperate in enforcing the agreement and initiating a system for recording subsistence catches.

The states agreed not to adopt closures which would have the effect solely of limiting the Indian dip net fishery.

Two Mrs. Friele Die In Bristol Bay Crash

Mrs. Haakon B. Friele and her daughter-in-law, Mrs. Harald Friele, were killed in the crash of a private airplane in which they were guests returning to Seattle when it crashed and was burned immediately after take-off from King Salmon, Alaska, July 10.

H. B. Friele is president of the Nakat Packing Corporation and Harald Friele is assistant superintendent of the company's Bristol Bay cannery at Nakeen.

Both women were widely known in the salmon canning industry, Mrs. Haakon Friele in particular having attended many conventions of the Association of Pacific Fisheries, and otherwise through the years played a prominent part in the social affairs of an industry of which her husband is a leading figure.

The feeling of loss was wide through the salmon industry, which sensed the tragedy as a particularly personal one.

Antibiotic Use on Fish Approved by Japanese

Antibiotic protection of fish quality was sanctioned by Japan this summer when the Ministry of Public Welfare adopted a policy permitting the use of Chlortetracycline, called Acronize where used commercially in the United States, under specific limitations. These are:

1. Content of chlortetracycle in ice must be less than 5 parts per million.
2. Use is permitted only aboard West Area pelagic trawlers operating in the East China Sea
3. The antibiotic may be used only on such fish as "guchi", "eso" and "hamo", which are to be made into fish paste products.
4. It is specifically forbidden that the antibiotic now be used on any fish which are to be marketed raw.

The fishing industry considered the approval for use of chlortetracycline as an important advance, in that the volume of fish for which its benefits are approved is very large, and the season for the operation favorably affected is just beginning.

Sockeye Scientist Drowns Studying Seaward Migrants

Peter C. Johnson, a member of the scientific staff of the International Pacific Salmon Fisheries Commission for the past five years, was accidentally drowned in early July at Baker Dam, Wash.

Mr. Johnson was in charge of this year's study of downstream salmon migrants at this dam, and the project had just been completed at the time of his death. The operating gear was being removed from the reservoir above the dam when the accident occurred.

Thirty years old, Mr. Johnson was born in Prince Rupert and received his arts degree at the University of B.C. He served in the Canadian navy during the war. He was one of the more prominent research investigators on the problem of preventing losses of young and adult Sockeyes at dams, and wrote several reports on the subject, one of them being based on experiments at Baker Dam.

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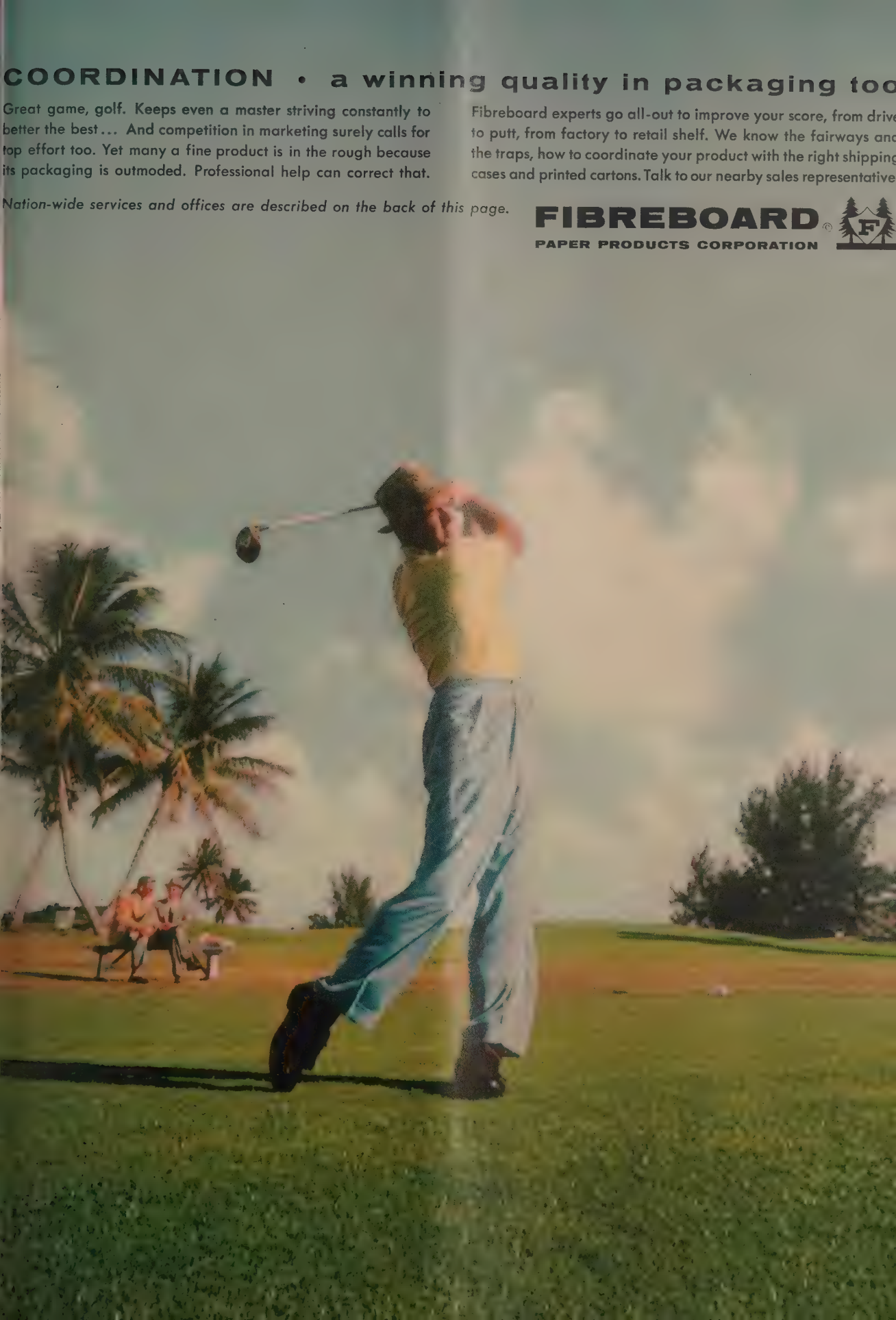

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AUGUST 1957

PACIFIC Fisherman's NEWS

Albacore Hit Lightly on Long North-South Section of Coast From Coronado Is. to Oregon

• Albacore were hitting in a flurry of light taps all along the coast from Los Coronados to Cape Lookout as this issue went to press.

Deliveries had not been heavy anywhere, although of course Southern California had most of the fish, and definitely the large ones. It was early of course for Southern California, and the catch at last report by the U. S. Bureau of Commercial Fisheries indicated San Diego deliveries were running slightly ahead of even dates in the two previous years.

The margin was scant, however, and could easily be reversed.

• Albacore price in Southern California shook-down July 23 after some weeks of fishing on an "open ticket" basis, or with an advance of $300 by some buyers, while others were paying $310.

Buyers who had been taking deliveries on an open ticket basis with a $300 advance paid an extra $10 on all deliveries up to July 23. Thereafter the price was uniformly $300.

• Pacific Northwest Albacore boats struck fish in a token way before the middle of July, Elmer Astala of Astoria taking the first Longfin with his *Bristol* 70 miles off Heceta Head July 9.

Then James Venable's *Kiska* cracked into fish 110 miles at sea off the Oregon coast and did right well until his d. f. went out and he had to put into Eureka to get it fixed.

In the fourth week of July there was a substantial concentration of boats working about 140 miles west by South of Cape Arago, and the boats all seemed to be in scattered fish, taking perhaps 100 a day each.

Further north, there seemed to be tuna off Cape Lookout.

• None of this added up to a lot of tons of fish, but to hit Albacore by mid-July was so reminiscent of the experience of the Mid-forties that the fleet began to wonder if the Albacore were swinging up the coast again after so many lean years.

Time was when they got a few Albacore in July, preliminary to the good fishing of August and September, but that was before some of the men who are fishing today had started to shave.

The PIFI research boat *John R. Manning* and *Hugh N. Smith* were in port at Astoria in July after exploratory fishing which had brought them all the way from Hawaii in an effort to trace the presumed migration route of the Albacore from the "hot" area north of Hawaii to the Pacific Coast.

The *Smith* was commanded by Capt. Barnes Collinson, back in home waters once more after much wandering.

Case On, Edmunds Off U. S. Fishery Advisory Agency

Mason Case of San Pedro succeeded Mark Edmunds of Garibaldi, Ore., in the Pacific Coast delegation to the American Fisheries Advisory Committee when that agency was shaken-up and reorganized recently by Secretary of the Interior Seaton.

The other five Pacific Coasters held over, with specific terms in years as indicated:

Donald P. Loker, vice president, Star-Kist Foods, Terminal Island, Calif., 1;

Lawrence Calvert, president, San Juan Fishing & Packing Co., Seattle, 1;

T. F. Sandoz, president, Columbia River Packers Association, Astoria, Ore., 2;

Arthur H. Mendonca, president, F. E. Booth Co., Inc., San Francisco, 3;

Chris Dahl, partner, Kayler-Dahl Fish Co., Petersburg, Alaska, 3;

Mr. Case was appointed for two years.

Designation of fixed terms for members of the committee is a new angle, which will retire one-third of the membership annually.

The committee, which is created by law to advise the Secretary of the Interior with respect to employment of the funds available as result of the Saltonstall-Kennedy Act, met in Ketchikan July 22-25 with Assistant Secretary of the Interior Ross Leffler presiding.

Siino Brothers Continue Monterey Boat Works

Ray and Frank Siino have taken over the ownership and management of the Monterey Boat Works since the death of their father, Angelo, who passed away at the age of 69.

Mr. Siino had been a Monterey boat builder for the past 40 years.

Monterey Boat Works recently built the *New Sea Wolf*, a 54' party fishing boat for Sam's Fishing Fleet, Monterey. The craft is powered with a GM 6-71 diesel engine, with 3-1 reduction gear.

Liz-Art, troller, owned by Haskins Bros., Moss Landing, received a complete overhaul at Monterey Boat Works, including new keel and garboard planking.

Thieves Loot Troller

Thieves stripped the 47' salmon troller *Flo*, owned by Albert Bates, Seattle, while she was aground near Eureka, of $2,000 worth of gear, according to Mr. Bates.

Flo, a steel hulled vessel, went aground June 20, and was successfully beached June 29. She has been stripped of practically all movable gear.

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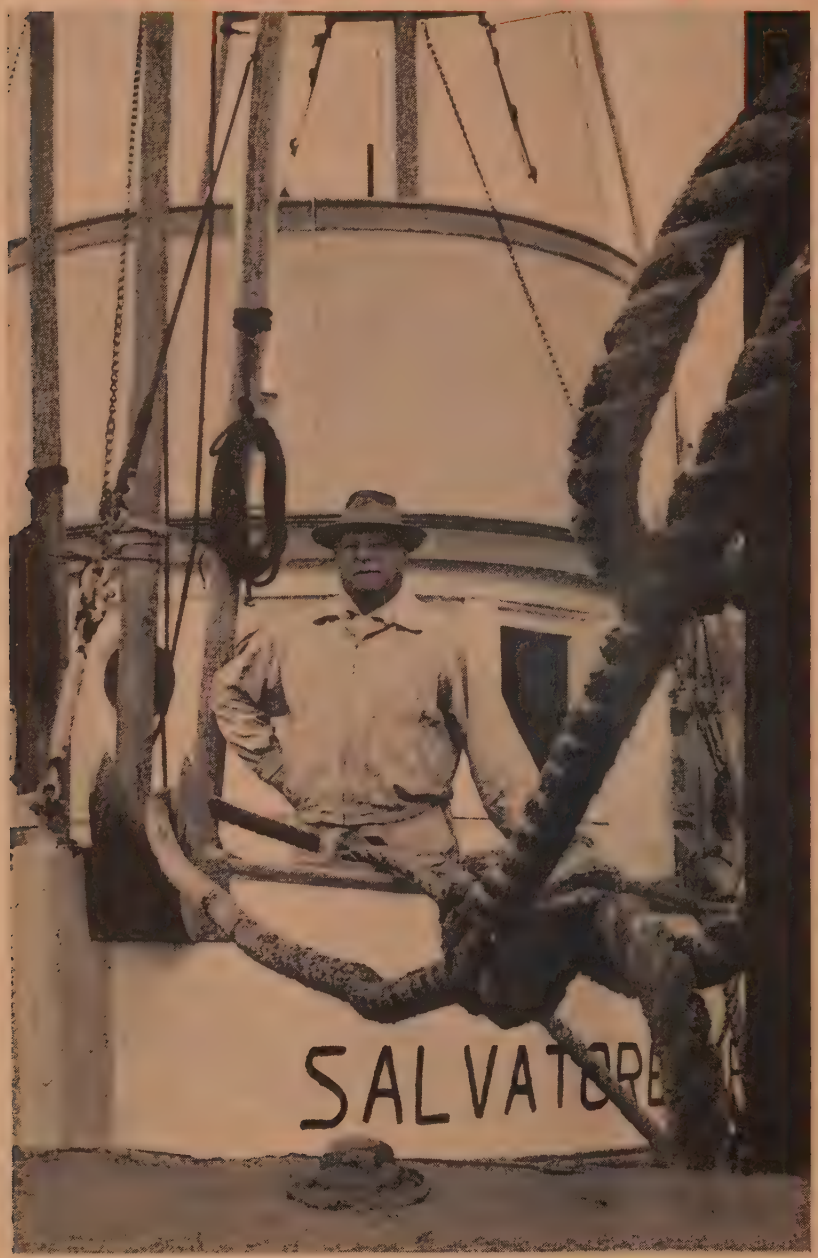

Mr. Salvatore Piazza, above, owner-skipper of M/V Salvatore Padre, has operated his 60-foot fishing boat for 15 years—using RPM DELO Oil exclusively. Vessel's 110-horsepower Atlas diesel still has original rod and main bearings. Engine of this vessel has been torn down twice for inspection—only parts replaced were a set of piston rings, installed in 1947. Mr. Piazza says, "This engine is still very clean and smooth running. RPM DELO Oil has kept it that way for 15 years. I wouldn't use any other."

M/V Salvatore Padre, operating out of San Francisco, goes as far south as Mexico fishing for salmon, albacore, sardines, crab.

Engine Room is supervised by Mr. Piazza's son. Latest engine inspection showed no carbon, sludge, or deposits of any kind.

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Pacific Fisherman's NEWS

AUGUST 1957 Volume 55 Number 9

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Tuna Long-Line Fishing Succeeds in Atlantic

Long-line fishing for tuna off the Atlantic Coast from Long Island south to Cape Hatteras this summer yielded some excellent catches of Bluefin and Yellowfin tuna, with a few Albacore to the exploratory fishing vessel *Delaware* of the Bureau of Commercial Fisheries.

Over 16,000 lbs. of Bluefin was taken on one 80-basket set; and sets of over 2,000 lbs. were relatively common. The fish averaged large; bluefin, 350 lbs.; Albacore, 35 lbs.; Yellowfin, 116 lbs.

Shark damage was less than anticipated.

Plastic Replaces Zinc On Clipper's Coils

The Harbor Boat and Yacht Co. last month installed a 300-hp. Caterpillar engine, Model D 375D, in the 80' bait boat *Marie Louise* and is in the process of installing new well refrigeration coils in the 100' tuna clipper *West Coast*. Coils will be treated with the Amercoat Dimetcote paint system in lieu of galvanizing.

Tuna Seiners Co-Op Mounts Drive to Gain a U. S. Quota On Excessive Fish Imports

● Fishermen's Cooperative Association of San Pedro is again planning a drive in August for a protective quota to harness excessive imports of tuna, according to Mason Case, general manager of the co-op.

"This time we are going all-out and we don't intend stopping our drive until we receive a favorable decision on the imposition of a protective quota," he said.

"It's just plain nonsense for the government to sit back and watch our domestic fleets flounder and go under for want of a little of the same protection that is granted other industries," he continued.

"It doesn't take a lot of judgment to determine the danger or our present plight when figures show the domestic producer sharing over 90% of the total market in 1948 as against less than 50% today.

"Some of the importers claim that we cannot supply enough fish to earn a greater percentage of the market. We reply that during the past 10 years there has not been one tuna purse seine vessel launched. Our fleet is down by 67 vessels, lost to foreign sales and sinkings and not replaced, and we understand that this is also the case in the independent bait boat and albacore troller fleets as well.

"At the same time, we haven't been able to fish unrestrictedly with what fleet we have left the past few years, so don't tell us we can't produce more fish if given the opportunity."

Concerning the self-imposed quota the Japanese are presently employing, Mr. Case stated: "The Japanese quota is increased at will and serves only the purpose of our State Department as a flimsy excuse that the import situation is being handled.

"It is almost as ridiculous as the so-called 'reciprocal' agreements used in trade.

"Japan can ship all the frozen tuna she wishes into this country free of duty, but try and ship them a pound of fish. It was our experience to discover that Japan not only has a high duty on imported fish but that she simply shuts the imports off completely by refusing to grant an import permit to those interested in shipping her fish. We know, for we made a try at shipping bluefin to Japan."

George Fukuzaki, a member of the board of directors of the San Pedro co-op, said, "Our present low price on tuna was 'sold' to us on the basis that it would help control imports. What they didn't tell us is that we're in competition with the Japanese government; and I'm sure the Japanese government can outlast the efforts of our domestic tuna fishermen."

Another member of the board of San Pedro's Fishermen's Co-op, Andy Tipich, stated, "I understand that President Eisenhower vowed that no domestic industry would collapse under excessive imports. The danger as I see it is in proving when we're hurt.

"If it takes the complete collapse of the boat owners and fishermen to make the point, it might take two or three years to do the job, but it's a cinch we're on the road for sure."

New $600,000 Clipper "San Juan" Launched

San Juan, a new $600,000 tuna clipper went down the ways last month at National Steel and Ship Building Corporation. It will be operated by Westgate California Tuna Packing Co., an affiliate of National Steel.

Skippered by David Rico, the new vessel is 127' long, with carrying capacity of 345 tons. It was christened by Mrs. Carol Smith Hodgkins, daughter of the president of National Steel, C. Arnholt Smith.

Ninth of its class built by the yard in recent years, the clipper now is being outfitted for its first trip.

Her sister ships include the *United States, Concho, Cabrillo, Sea Preme, Independence, Westport, Missouri* and the *Elsinore*, all presently fishing for Westgate-California. These nine clippers represent an investment of approximately $4,500,000.

"Rocking Chair Money" Available in Calif.

California's governor Goodwin S. Knight has signed into law a bill making fishermen eligible for special unemployment benefits. When the law goes into effect on Sept. 21, fishermen will be eligible for amounts up to $40 per week.

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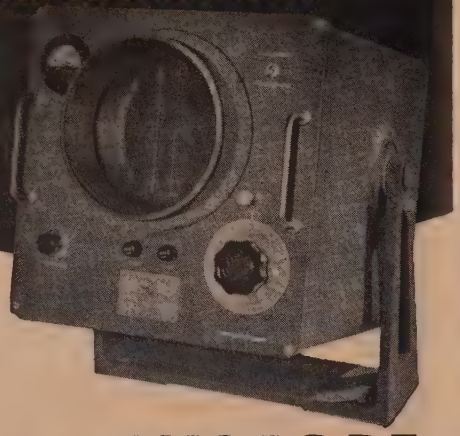

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SCOPE and SOUNDER

Monthly digest of present-day pioneering methods and equipment in world fisheries.

By PETRALE

Racial Segregation Rules n Pacific Tuna Schools

Inter-American Tropical Tuna Com-ission recently published Vol. II, No. in their series of bulletins dealing ith the investigation of tunas of the stern Pacific Ocean. The bulletin. ritten by Craig Orange, Milner B. haefer and Fred Larmie, reports on e schooling habits of Yellowfin and kipjack tuna.

These species are usually found and shed in the same areas during the me season. Since there have been me indications that Yellowfin have ecently been exploited at or near their aximum sustainable yield level, the egree of association between schools f these tropical tunas becomes an im-ortant aspect of any future attempts regulate the catch of either Yellow-n or Skipjack.

The schooling habits were investi-ated through evaluating log book rec-rds maintained by tuna purse seine shermen. Association of the two spe-es was defined by the relation of the umber of sets which produced catches f single species compared with those roducing mixed catches.

Results of the study showed that at ast 9%, and in many years more an 90%, of the sets made resulted pure schools of one or the other pecies. In studying the poundages ken in the above sets it was deter-ined that between 80 and 90% of e total catch was obtained from pure hools of tuna.

Unusual Fish Caught By Washington Trawlers

In the recent issue of Fisheries Re-earch Papers published by the Wash-gton Department of Fisheries two eattle trawl skippers were credited ith catching and bringing to the at-ntion of biologists two unusual spe-ies of fish. A rough-scale flounder, ommonly fished off the coast of Ja-an, was captured by Capt. Lars Svege. kipper of the *St. John*, on the west oast of Vancouver Island. This was e first known record of this flounder ecurring on the west coast of North America. According to fisheries authorities, the fish was over 3,000 miles in direct line distance, and some 4,000 miles following the continental edge, from its known habitat. Lars captured the fish during a set for petrale sole on the Esteban Deep during March, 1955.

A single specimen of a very rare fish was caught by Capt. Perry Buholm, skipper of the trawler *Regina*, during March, 1954. This fish, identified as a false fan fish, was also taken on the Esteban Deep grounds. The specimen, one of the largest ever reported, was the first of its kind known to be taken from waters along the Pacific Coast of the United States. Both rare fish were placed in the University of Washington School of Fisheries.

Vertical Distribution of Young Salmon Studied

● The unsolved problem of passing young migrant salmon around dams is under intense study by various international, federal and state research agencies. Adequate protection for passing downstream migrants beyond dams requires a fundamental understanding of the vertical and horizontal distribution patterns of seaward migrants, which occur in the forebays of dams.

Studies of this nature concluded in the spring of 1955 at Baker dam, was recently reported on by William Reese, a biologist with the Washington Department of Fisheries. A series of variable net gillnets were used to sample the salmonoid distribution in the forebay of the dam. The nets, 60′ long and 15′ deep, were fished simultaneously at 12 various depths and at horizontal sights from 400 to 500′ in front of Baker Dam. The test clearly demonstrated that the area of greatest density was the surface waters (0-15′). With increasing depth the numbers of fish decreased. In summarizing the results of the study, the author states that the data indicates a preference by all species for the surface layers. Although the surface layer comprised only 19% of the cross sectional area of the forebay, 89% of the fish were captured in this region. While considerable variation occurred in the horizontal distribution of the young salmon, the greatest numbers were in the waters along the lake edge. Light intensity evidently affected horizontal distribution and on bright days Sockeye and Silvers were more abundant along the same banks than cloudy days. No relationship could be demonstrated between temperatures and vertical distribution.

John L. Cobb to Study Alaska Herring Offshore

● The exploratory fishing vessel *John N. Cobb* left Seattle July 15 to carry out herring studies in the offshore waters of Alaska. The vessel arrived in Little Port Walter on July 19 and is expected to work seven weeks in the waters off Baranof Island and to Prince William Sound. Although a commercial fishery for herring has existed since shortly following the turn of the century, in bays and inlets of Alaska, no ocean fishery has developed. Fishing vessels crossing the Gulf of Alaska at times have reported seeing schools of herring in the open ocean but actual knowledge of their abundance and availability in these waters is fragmentary. A knowledge of the extent inshore herring migrate off shore and to what extent, if any, possible offshore population contributes to inshore fisheries will aid scientists in evaluating trends of availability and the effect of the fishery on abundance trends.

A series of zigzag courses will be made to a minimum distance of 50 miles offshore and with at least one track line extending to the middle of the Gulf.

Fishing gear includes mid-water trawl and gillnets. The offshore studies will be closely coordinated with inshore herring research which is administered by the Alaska regional research office. A biologist from the Juneau laboratory will be aboard the *Cobb* to participate in explorations and to collect data for racial studies.

Norma Joan, 36′ salmon and crab boat owned by Ernie Parker, Parker Diesel Engine Co., Oakland, has been sold to Manuel Tovares, Fort Bragg, through Don Woodward, Oakland.

Francisco Grillo, Monterey, owner of the dragger **Two Brothers,** has repowered her with a rebuilt GM 6-71 purchased from and installed by Hover Equipment Co., Monterey.

Julius Fischbein, Seaboard Fishing Co., New York, was a Pacific Coast visitor last month. While in California he visited **Ralph Marsh,** Marsh Marine Products Co., Moss Landing.

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The 127′ "United States", owned by Galapagos, Inc., San Diego, landed 340 tons last May for a capacity maiden trip. The new boat's beam is 30′ 6″; depth is 14′ 6″.

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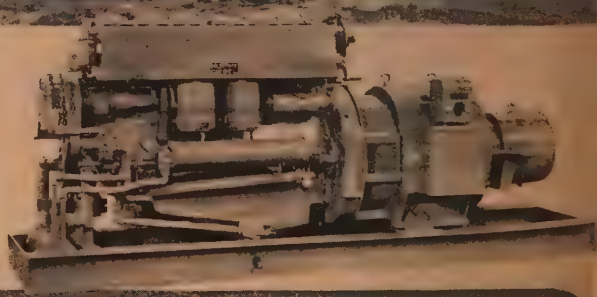

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Sea-Water Chilling — —

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● Holding salmon and halibut in chilled sea water during the time that must elapse before processing is rapidly gaining acceptance in the northwest fishing industry. Chilling units have been installed in trollers, seiners, tenders, packers and canneries with great success in the United States, Canada and Alaska.

Tom Olson, superintendent of the Emard Packing Co., which uses a sea water chiller on its cannery dock at Anchorage, says: "We're very happy with it. We can easily hold fish for a week or more, and they come out of the tanks looking like they've just been caught."

J. J. Lind, vice president of Alaska Year Round Canneries, commenting on his company's sea water-chilling-barge *Humpy*, says: "We're very well satisfied with the chilling system. Last year we held fish as long as six days with good results. We're so satisfied, in fact, that this year we're putting another chilling unit on our dock at Seldovia."

Bigger than they look—The steel sea-water chilling tanks on a Libby power scow. These two tanks are 18' in diameter and the side walls are 6' high. Together they will hold 10,000 Red salmon at barely-above-freezing.

Chilling Benefits Manifold

● With chilling tanks on their docks and barges, canneries can hold all the fish that their boats bring in. They need not work around the clock, on weekends and holidays, to keep up with the supply when fishing is good on the grounds. Spoilage from an excess of fish on hand at the cannery is reduced to nil.

Fish chilled in sea water retain their fresh-caught appearance. They come out of storage days later as round and firm as when caught. Absent are the usual dents from sharp ice particles since the fish are virtually suspended in salt water, which has nearly the same specific gravity as the fish themselves.

● Weight of dressed fish remains the same, as there is no crushing in the chill tanks. When packed layer upon layer in ice, considerable volume is lost by sheer weight of fish and ice on those on the lower levels.

Boats can stay on the fishing grounds until they have a full load. Trollers and seiners equipped with sea water chilling gear need not run for the cannery or tender as they did when their ice had melted or fishing had slacked off.

Harold Hines, skipper of the 45-foot troller *Sally*, in which a sea water chiller and tanks were installed last month (see article "No More Ice For Sally," page 42, *Pacific Fisherman*, April, 1957), says: "With this setup I'll be a one-man operation. I won't have to take time to ice down the fish —just catch them, clean 'em and slip them into the ice cold sea water. I can stay out 'til the tanks are full."

Sea Water Chilling Not New

● Although comparatively new to the Northwest, a variation of this system for holding fish has been used for years by the tuna fishing industry. And as early as 1931 the Fisheries Research Board of Canada advocated using refrigerated sea water for holding salmon over long periods.

In the Northwest, the chilling method was first successfully demonstrated in British Columbia, where it was applied to trollers and canneries.

One of the first canneries to use this method was Francis Millerd & Co.'s Great Northern installation in West Vancouver, B. C. One of the first successful applications to a fishing boat was that on the Canadian troller *Phantom II*.

She used a plywood fish tank with cooling coils mounted on all four sides. Refrigeration was supplied by a ½-h.p. Freon-12 compressor, belt-driven from the boat's main engine.

S. S. M. Harrison and S. W. Roach, who did most of the research and experimental work in this connection for the Pacific Fisheries Experimental Station in Vancouver, found that com-

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pressor size should be about 1 hp. per 3,000 fish. This ratio will cool the initial load of sea water from 50° to 30° F. in about 10 hours.

In 1950 W. E. Stone & Co. of Seattle designed and built a sea water chilling installation for Kayler-Dahl Fish Company's cannery at Petersburg, Alaska. This system employs four fish bins, with sea water refrigerated in a shell and tube chiller connected with a central ammonia refrigeration system.

● One of the first vessels designed and built expressly for transporting fresh salmon in chilled sea water is the 74-foot steel-hulled fish carrier *Snow Mist*, owned by the Whiz Fish Products Co. of Seattle.

Designed by William Garden and built by the Jannsen Boat Works in 1955, the *Snow Mist* carries fish "dry" on short hauls and uses her sea water chilling system for longer distances.

Her two sea water tanks hold 5,000 gal. each, with a circulation of 200 gal. per min. These fish tanks are also cooled by overhead coils to permit their use for "dry" transport at about 30° F. when desired. Forward of the sea water tanks is a "dry" refrigeration hold about 18 feet long. This hold, like the sea water tanks, is fully cork insulated, with refrigerating coils overhead.

The Refrigeration Engineering Co. of Seattle built the refrigerating system.

Chillers Built and Building

● Emard Packing Co. cannery at Anchorage employs a sea water chiller and tanks to hold salmon over weekends and when the cannery is running at full capacity and unable to process the fish on hand. Emard's chiller, a Refco SWC 1500, was also designed and built by the Refrigeration Engineering Co.

"It wasn't much of a job to set the system up," says Supt. Tom Olson. "We built two tanks of wood staves, 16' in diameter and 7'4" high inside, then drove some piling to support the extra weight. The refrigerating machine came as a package unit and all we had to do was connect it with the tanks.

"Now we just unload the fish from the boats directly into the tanks and sort them later when we take them out. Our two tanks combined hold about 140,000 lbs. of fish."

Jaguar is one of Kadiak's famous red-and-bank tenders, shown here receiving her new sea-water chilling installation. Her tanks will carry 12,500 Pinks in seawater just above the point of freezing.

Since the waters of Turnagain Arm are heavily silt laden, Emard Packing Co. fills its tanks with fresh city water, adds salt to bring the salinity up to that of sea water, then chills the solution to 30° F.

"We're highly pleased with the results and expect our chilling system to pay for itself in a short time in fish saved," said Mr. Olson. "At about $1.35 apiece for Red salmon, it does not take much spoilage to mount up."

● Another processing plant, Alaska Year Round Cannery, in 1956 installed a Refco SWC 1500 on a barge for use on the fishing ground. Its two steel tanks hold an estimated 10,000 fish each. Refrigeration Engineering Co. built the chiller. Flohr & Co. Metal Fabricators of Seattle built the tanks. Another Refco SWC 1500 was installed on the cannery's dock this year. It employs wood stave tanks for this installation.

Typical of sea water chilling equipment installed on cannery scows is that for Libby, McNeill & Libby at their Seattle yard.

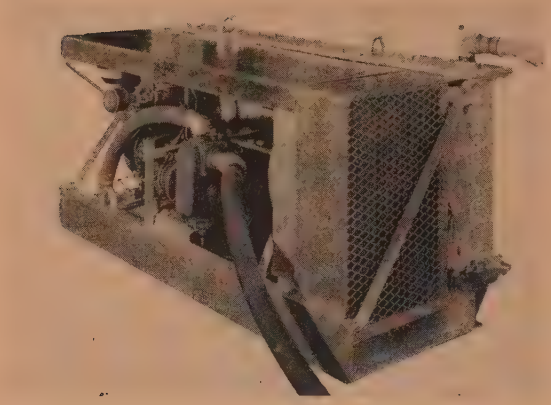
Entering the final stages of completion as this was written, the Libby

The scow was fitted with two circular steel fish tanks, each of which will hold 10,000 six to seven-lb. Red salmon or about 70,000 lbs. of salmon per tank. These tanks are 18' in diameter, 6' high, with conical roof that extends 7' in the center.

The refrigeration unit, a Refco SWC 1500, is powered by a 4-cyl. Chris-Craft engine.

For loading and carrying supplies while running to the fishing ground in Bristol Bay, the fish tanks are fitted with cargo hatches in addition to fish

Compact package for seawater chilling goes aboard the salmon troller **Sally** in this unit built by Refrigeration Engineering Co. for fishing vessel duty.



Portable character of the W. E. Stone & Co. refrigeration unit is emphasized in its name "Port-A-Chiller." Note that it is fitted for hoisting and easy installation.

loading chutes.

For insulation, the two tanks were underwent modernization last spring covered with two-inch-thick foam plastic held in place by metal bands. This material, Armor Lite, is manufactured by the Armstrong Co. Flohr & Co. built the tanks, fish elevator and chute system.

Another Libby scow, presently in Bristol Bay, was similarly equipped in 1955, but employs rectangular tanks of approximately the same size. The Refrigeration Engineering Co. supplied the chilling machinery.

● A prime example of sea water chilled cannery tender is the Kadiak Fisheries steel vessel *Jaguar*, which underwent modernization last spring at the Marine Construction and Design Co.'s yard in Seattle. There she had installed in her hold four steel chilling tanks and a WESCO sea water chilling unit built by W. E. Stone & Co., Inc., of Seattle.

Total capacity of the tanks is about 12,500 six-pound salmon. Two tanks are mounted in the hold on port and starboard sides. Each is fitted with a hydraulic unloading gate, which will discharge fish into the elevator well. Two loading trunks are located on each side, one for each tank. The elevator, built by Flohr & Co., will discharge chilled salmon as well as "dry" stored fish held in the space between tanks.

The Wesco chilling machine was mounted in the engine room. Its heat exchanger, or actual chilling tank, was bolted to the sides of the fish tanks.

The steel fish tanks are mounted on a webbing of two-inch wood battens to protect the existing wood skin from deterioration and to provide air space for insulation. Additional insulation is provided by a layer of K-Cote, an asphalt and cork mixture, applied to the back surfaces of the tanks. In addition to its function as an insulating agent, K-Cote also acts as a vapor barrier to prevent corrosion.

NOTE—Sea water chilling units discussed here are just a few of many now in use or in the process of installation. Next month's issue of PACIFIC FISHERMAN will present other installations and describe the products and methods of refrigeration manufacturers active in the field of sea water chilling.

Escapade, a 50' wooden troller, was sold by Jack Herget, Berkeley, to Henry Knight and Ed McElroy, Sausalito, through Don Woodward, Oakland.

Murray Vout, Monterey, has repowered his salmon troller with a Chrysler Crown purchased from and installed by Hover Equipment Co., Monterey.

Anthony, a salmon troller owned by John Russo, Monterey, was sold through Horace Mercurio, Monterey boat broker and insurance man, to Robert Petersen, San Francisco.

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2c Rise in Sockeye Price Costs 3 Weeks of Fishing

● British Columbia salmon fishermen settled their price dispute with packers during the second week in July and went fishing, but only after they had missed about half the run on the Nass River and some of the early run on the Skeena and in Rivers Inlet because of the delay in negotiations and resultant strike.

As usual, the prices agreed upon by fishermen and operators represented a compromise. Last season the packers had paid a minimum of 24c a pound for Sockeye. At the start of this season the fishermen, through their union, asked for 34c, which the operators turned down as unrealistic in view of the general market situation.

However, the operators offered a 26c price for Sockeye and this in turn met with a counter-proposal from the union for 31c. The figure finally agreed upon was 28c for Sockeye. For Coho the price agreed was 15½c; Pinks, 9¼c, Chums 7c with provision for re-opening negotiations later in the season.

Opening date for salmon fishing had been set for June 22, but it was not until nearly three weeks later that operations got fully under way.

As a result of the strike called by the union when early negotiations were stymied, packers laid off net-loft and other shore personnel on the ground that since there would be no fish to handle there was no use in maintaining crews. The United Fishermen and Allied Workers' Union interpreted this as a lockout and sought continuance of the strike until packers had agreed to reinstate their laid-off workers and award them back pay. However, the shore workers voted in favor of going back to work just as the fishermen had voted a few days previously to accept the final price offer of the packers, thus ending the 18-day tieup. Union leaders had urged rejection of the companies' offer.

However, the question of back pay for the net-loft and other workers was to be submitted for arbitration. The Fisheries Association agreed fully to compensate employees involved if the board of arbitration ruled that the companies were not entitled to the lay-offs. It denied that there had been any lockout.

A. J. Conger, who saved an abandoned troller at the mouth of the Columbia July 10 with his dragger **Nestucca.**

Bud Conger Saves Boat Abandoned by Owner

A. J. "Bud" Conger, hard-fishing skipper of the Astoria dragger *Nestucca,* risked his boat to save another —and did—in the violent gale which raked the North Pacific coast July 10 and blew-in the fleet.

George Sauver, fishing alone aboard his 26′ troller, sought to run into the Columbia for shelter from the gale. He was boarded by seas, disabled and largely swamped. The troller *Tucca* got a line aboard and sought to save the Sauver boat from the spit, but the line broke and Sauver was taken aboard the *Tucca* to save his life while the boat was abandoned.

Then Conger came by in his *Nestucca* and, finding the boat abandoned, got a line aboard and hauled her off, radioing the Coast Guard, which came to his aid quickly, picking Sauver up from *Tucca* en route. The swamped troller was taken over from the *Nestucca* by the C. G., which gave Conger full credit for saving it from destruction.

While the *Nestucca* had the troller in tow she was smashed by a sea which cleared the glass out of her pilothouse window frames and disabled the radio. Riley R. Linville, a crewman, was badly cut about the nose and face by flying glass.

Thief Steals Fishing Boat 110 Ft. Long

An extraordinarily confident thief has relieved Franklin Simon, San Pedro, of his fishing boat *Vida R.* A bulky piece of loot, the *Vida R.* is a converted sub chaser 110′ long. Simon said that he first missed the boat on July 5 and immediately called fueling stations in the area to see if crew members had taken her for refueling. The Union Oil dock informed him that the boat had taken on 1,600 gallons there and that a man named Richards had signed the chit. Mr. Simon knows no Mr. Richards.

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38-Foot "Carmen B" Makes Run to False Pass

Few "pocket seiners" make the long run to False Pass under their own power, but Louis Bussanich did it this spring with his new steel 38-footer *Carmen B.*, built for him by Marine Construction & Design Co., Seattle.

Not only that, but he plans to run her back to Seattle again when the False Pass season closes and to get in the Pink salmon season on Puget Sound. This will be an annual program—not the Pinks, of course, but the two-fishery operation.

Ability to make this kind of a run in a tunnel-stern vessel drawing only 2' of water lies in the 14' beam. This was provided primarily to give a stable seining platform for a power block operation.

She's a four-man seiner, and with her 18" power block is expected to prove an effective producer. Power is a 120-hp. turbo-charged Cummins diesel, swinging a 22 by 20 bronze Olympic wheel through 2 to 1 reduction gears.

Beside her power block, which is hydraulic-driven, she carries a Marco hydraulic purse winch.

Speed With Shoal Draft
Plus capacity mark this 38' steel "pocket seiner" which Louis Bussanich had Marine Construction & Design Co. build for him this spring. She's engineered to use a power block—**note her 14' beam in 38' length.**

New Research Vessel For Calif. Fisheries

The Marine Fisheries Branch, California Department of Fish & Game, will have a new research vessel come mid-September.

The craft is the *USS Alaska*, acquired from the U. S. Fish & Wildlife Service on a 10-year loan. She is being readied at a Miama, Fla., shipyard to make her one of the most modern and best equipped fisheries vessels in the world.

The 100' steel ship, powered with a 600 hp Enterprise engine will be used for marine surveys and development work aimed at obtaining facts for better management of California's ocean resources. She has accomodations for 17.

Paul Petrich, Department of Fish & Game port captain, will oversee modification of the vessel and will act as consultant on the job.

Jack Balbo Marries

Wedding bells rang out last month for Jack Balbo, A. D'Acquisto & Sons, Fishermen's Wharf, Monterey fishermen's supply and equipment firm, and Capt. Mary J. Culver, U. S. Army nurse stationed at Fort Ord. The newlyweds will make their home in Monterey.

Jack has been with A. D'Acquisto & Sons for the past seven or eight years. Before that he was manager of the Shell marine service station.

Capt. S. A. Ness Dies On "Trinity" at Sea

Capt. Surland A. Ness, 67, one of the stalwart veterans of the Seattle halibut fleet, died suddenly of a heart attack July 13 aboard his famous schooner *Trinity* at sea off Cape Alitak, hard-by the Trinity Islands Bank from which his vessel may have taken her name.

A native of Norway, Capt. Ness had lived in Seattle for 46 years.

Beside his widow and two daughters, he is survived by two brothers in Seattle, Marcus and Sigurd Ness, and three in Norway.

"Skip" Cincotta Marries

Wedding bells rang out this last month for Antone G. "Skip" Cincotta, Jr., son of Tony Cincotta, owner of Cincotta Bros., fishermen's supply and equipment firm, San Francisco, and Monterey, and Mrs. Cincotta, and Miss Diane Tocchini, daughter of Mr. and Mrs. Harry Tocchini, San Francisco.

Shedo Russo Dies Fishing in Alaska

Shedo Russo, 53, Monterey fisherman and former managing partner of the purse seiner *Juanita* died suddenly of a heart attack in western Alaska. He was fishing at Koggiung for Libby, McNeil & Libby.

Mr. Russo was a native of Pittsburg, Calif., where he spent the first 17 years of his life. He leaves a daughter, a son Neno; three brothers, John, Frank, and Ratzie Russo, and a sister, Mrs. Marion Altavilla, all of Monterey, and a number of cousins, including S. "Buck" Russo, Monterey councilman.

Canadians Save Fish Boat off California

Canadian sailors assisted in saving the fishing boat *Happy Day* when she went on the rocks 50 yards off San Clemente Island last month. While another fishing boat, the *Bet-Jo*, stood by, the Canadian navy men pumped out the stricken vessel and refloated her. Carl Speight, Long Beach, owns the *Happy Day*.

Quick Pick-Up

Crew members of the 40' Albacore troller *Orgy* were rescued after their boat struck a breakwater near Long Beach in late June and sank in 48' of water.

Enroute to the fishing grounds, the boat was on automatic pilot when it struck the rocks. Within five minutes after hitting the breakwater the three crew members were taken aboard the fishing boat *Nerad*.

Robert Tidwell of Garden Grove, Calif., owns the *Orgy*.

Monterey Skipper Dies

Sal Maiorana, 65, skipper of the well known Monterey purse seiner *Twin Brothers*, died of a heart attack recently.

He was the brother of Pete Maiorana, skipper of the well known purse seiner *Diana*, and Angelo Maiorana, skipper of the *Dux x*.

He leaves a wife, four daughters, and twin sons. The *Twin Brothers*, still owned by Mr. Maiorana's family, will be skippered by his son-in-law Eddie Genovese.

The 50' Monterey dragger **Tira**, owned by Steve Genovese and Joe Lopez of American Freezer Co., Monterey, recently was overhauled at the Monterey Boat Works.

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"Tommy Boy" Tows Yacht from Rocks

Crew members of the 38' seiner *Tommy Boy*, San Pedro, last month pulled the yacht *Dream* off rocks near the entrance to Catalina harbor. Three times the line parted before she succeeded in freeing the *Dream*, and although her propeller became fouled in kelp and her engine consequently overheated, the *Tommy Boy* towed the *Dream* into San Pedro.

Damage to the *Tommy Boy's* engine from overheating and loss of her fish catch due to delay of delivery to the cannery was estimated at $2,000. Crew members included Skipper Tommy Trama, Vitorio Lombardo, Frank Donato, Vid Bologna, Thomas Scotti and Mylo Bocoka.

Fish Wharf Explosion

A gasoline explosion aboard the salmon troller *Mary* owned and operated by Hal J. Bailey, San Francisco, at Fishermen's Wharf injured two men and periled 100 diners at a wharfside restaurant last month.

Seven plate glass windows splintered and showered glass on customers at Castagnola's Restaurant. Dishes and glassware were blown from the tables. Tables and chairs were gouged by splinters. Fortunately only one patron was hurt, an unidentified small girl whose hand received a minor cut.

Aboard the *Mary*, a 29 footer were Ted Casteel and Larry Hicks who were repairing a leaky gas line. Both were taken to the emergency hospital to receive treatment for first and second degree burns.

Wm. Westerholm Wins Columbia Union Office

William Westerholm, who has gillnetted on the Lower Columbia River for 25 years, in July succeeded Charles Henney as secretary of the Columbia River Fishermen's Protective Union.

Born in the riverside community of Brownsmead, he has lived and fished from that point all his life.

Mr. Henney is returning to Waldport, Ore., where he made his headquarters before directing the affairs of the Columbia River union.

Boats Ship New Pilots

Antoinette II, San Francisco combination boat owned by Vince Pizzo, has been equipped with a Freeman Metal Marine automatic pilot sold by Shoreline Diesel Maintenance, Fishermen's Wharf, San Francisco, which also reports *Swan*, owned by Al Larocca, San Francisco, is now equipped with a Bendix automatic pilot.

Here are ten of the new gillnet boats working on Bristol Bay this season, pictured as they lay at the Commercial Marine Construction Co., Seattle, ready to go north. These boats are all powered with Graymarine engines, 244 and 330 cu. in. gas engines and 427 cu. in. Graymarine diesels.

Union Charges Union

ILWU Fishermen's Union, Local 13, of San Pedro, filed a charge of unfair labor practices against the AFL-CIO Seine and Line Fishermen's Union, also of San Pedro, in July.

Basis of the charge, reports John Royal, representing the ILWU, is that about 5 boat owners have entered into an agreement with the Seine and Line union requiring crew members not belonging to the AFL-CIO union to pay "support money" to it.

The agreement, says Royal, is in violation of the National Labor Relations Act and constitutes an illegal and unfair labor practice.

Bait Boat Scorched

Fire caused an estimated $1,000 damage to the 92-ton tuna bait boat *Santa Rosalia* recently while tied up at Berth 267 near the Star-Kist plant on Terminal Island.

According to fire department authorities an electric motor failure caused the blaze. Three engine companies and a fire boat responded to the emergency.

Jack Oseto, only crew member aboard, escaped injury.

Murder Is Possible In Troller's Death

A missing Eureka fisherman, Elwood V. Rost, 38, whose body was found floating off the Sonoma county coast may have been knifed to death, according to Coroner Vernon Silvershield.

An autopsy revealed by Mr. Rost had died of an eight-inch gash in his neck that is "compatible with a knife wound" the coroner said. Mr. Rost had been missing for two weeks. In the water near his body was a portion of a fishing boat mast. It was not known immediately if the mast was from the boat Mr. Rost was fishing, the 40' salmon troller *Judy Ann*, which is still missing.

Mr. Rost's body was found about a mile off shore from Bodega Bay by the crew of the fishing vessel *Sonny Mike*.

Dick Maier, formerly skipper of the **Warrior, West Wind** and **Stephanie** is now skipper of **Tira.**

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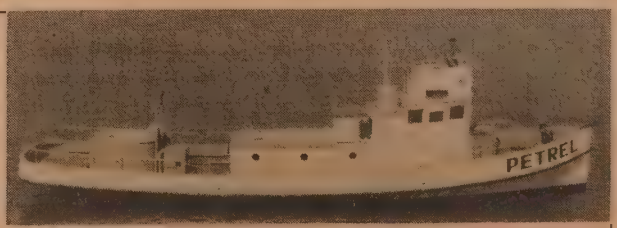
Archie Sanchez, Veteran Chevron Agent, Passes

The many friends of Archie Sanchez, 60, Standard Oil Co. marine distributor at Monterey, were shocked to learn of his passing after a short illness.

Archie had been with Standard Oil Co., distributing its products at the Standard Oil Co. marine service station on Fishermen's Wharf there for 36 years. His ready smile and his jokes are being missed by his host of friends and customers. In his youth he was a noted amateur golfer.

Alvin "Al" Annand, formerly a deep sea diver doing work for Monterey's canneries and fishing boats for the past 12 years, has been appointed new marine distributor in charge of the Standard Oil Co.'s marine service station at Fishermen's Wharf, Monterey.

Ray Waldrop's "Petrel" equipped with



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"Like almost all the tuna boat owners here, I've used it for 10 years or more with complete satisfaction. I've found that T5X keeps engines cleaner and therefore longer-lasting with fewer overhauls than any competitive oil.

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New Orleans: *644 Nat'l Bank of Commerce Bldg.* • ***Atlanta:*** *1401 Peachtree St.*

Letter From Lima--

Peru Looks at Larger Boats of Steel As Bonito Abundance Seems to Shift

(Staff Correspondence from Lima, Peru)

● The unusually warm oceanic temperatures, which prevailed through April and May, declined somewhat during June. Nevertheless climatic conditions, generally speaking, were extremely mild for the time of year, and it is doubtful at the time of writing whether a normal Southern hemisphere winter season is to be experienced. The effect of these climatic and oceanic conditions on future seasonal bonito and anchovy fishing naturally remain to be seen.

Whereas landings of bonito in the Chimbote area had been in excess of normal during May, they declined considerably during June and as a result packing of bonito fell off in comparison. Packing of bonito was limited to the Chimbote area, and to a much lesser degree to the Southern Peru area of Ilo and Mollendo. Bonito fishing off the Callao area was practically negligible during May and June, although some of the smaller packers were able to continue operating by hauling excess fish from Chimbote by truck at a considerable cost. The Callao area some years back was noted for its heavy and regular bonito catches. Over the past three years, a steady decline of landings consequent to a continued diminution of catch per boat has become evident, to such an extent that unless some unforseeable changes are to take place in fishing returns the Callao pack of bonito will be in future insignificant. As it is, a former leading packer with a capacity of about 2000 c/s per day is now out of business. Another leading cannery may, in all probability, abandon the packing of bonito; and a third cannery is about to move out its equipment to a location in Mollendo, in the Southern Peru area.

A plausible explanation for the diminution of bonito fishing, and the return per boat in or around the Callao area, was recently advanced by a leading U.S. oceanographer. In accordance with his theory, there may be two independent bonito populations, one of them circulating roughly from the northern Peruvian boundary to south of Callao, and other from northern Chile to the Mollendo area. Since the intensive fishing effort is now concentrated at or around Chimbote, the normal circulation of one of the bonito populations may be intercepted on its southerward run through that area, leaving Callao and adjacent zones with sporadic showings of bonito.

● Although technicians from the Fisheries Department were organizing a tagging program, such investigation has not as yet materialized, but it is expected to be put to effect in the near future. Such investigation certainly can shed much light on the migratory movement of the bonito, and may well corroborate the theory advanced.

Nevertheless, in support of this theory is the evident fact that, on the one hand, landings in Callao and adjacent zones have been diminishing more or less proportionally to the increase of fishing activities in the Chimbote area; and on the other hand, notwithstanding the intensity of fishing off Chimbote, the actual combined tonnage landed between Callao and Chimbote has not increased proportionally to the numbers of fishing units in operation.

Trend Toward Steel Boats Of Larger Power and Tonnage

● An interesting aspect of present fishing tendencies is the trend for larger fishing boats and an inclination to substitute steel for wood in boat construction.

Until recently a wooden seiner of

Coming in October 1957--

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"THE FISHERIES OF PERU"

● Growth of Peru's fisheries since World War II from nothing at all to almost 100 modern, active plants is one of the industrial phenomena of a phenomenal twelve years.

● To study these fisheries, their growth and their latent possibilities, PACIFIC FISHERMAN this spring dispatched its editor to Peru, where he spent a month gathering material and photographs.

● Now in the course of preparation, this comprehensive report upon one of the most dramatic developments in the whole history of the Pacific Fisheries will occupy our entire October issue, which will prove a valuable source book on the fisheries of Peru, for producers and distributors of canned fish the world over.

● COMPLETE COVERAGE: Our October issue, without exception, will go to all of the fisheries operators in Peru, Chile and Ecuador . . . as well as to all of the leading South American distributors supplying their requirements for machinery and fishing gear.

● Whether you are a producer or a distributor of canned fishery products; or a manufacturer of machinery or fishing gear, an advertisement in our Peruvian Issue in October will identify you unmistakably with the dynamic fisheries of South America.

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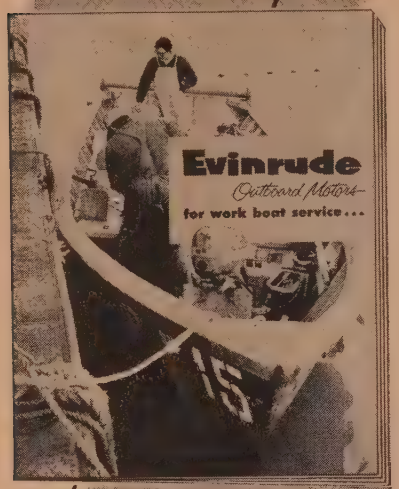

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about 42/45' was considered as optimum size. Now with the need to search further off shore for bonito and the increasing demand for anchovy by the reduction plants in operation, or about to operate in the coming season, the 42/45' boats are no longer economical. They are being replaced for boats with a carrying capacity of 50 tons, plus, equipped with diesel marine engines rating 150 to 170 h.p., which may serve a dual purpose for bonito and anchovy fishing, having at the same time a wider range of activity.

It is felt that with the increase in size of fishing boats, the moment may have come when it may be more practical and economical to utilize steel boats as against wooden ones.

The Peruvian shipyards are not presently equipped to change over from wood to steel, although certain work shops which build steel bodies for truck and transport vehicles are seriously considering expansion by building steel hulls. This trend may also afford opportunities for foreign shipyards to design steel seiners on a prefabricated system for final assembly and welding in Peru, by well-equipped and reliable steel works under technical supervision. The continual expansion of the Peruvian fishing fleet, and recent trend for larger vessels, may well justify further investigation by foreign shipyards. It is understood that certain contacts have already been established along the above lines with European shipyards.

The Export Picture

Frozen Fish	6,181	tons
Canned Fish—		
In Oil	8,503	tons
Equivalent to	680,240	cases
In Brine	1,507	tons
Equivalent to	120,560	cases
Fish Meal	22,330	tons
Fish Oil	2,006	tons

Breakdown by countries of destination had not been made available at time of writing.

Prices and Markets

● Notwithstanding the decline in production, solid pack demand remained stagnant, although some forced sales were reported as having been affected as low as U.S. $5.75 fob. Even at those low levels little, if any, interest was being shown by U.S. importers for solid pack, due it was believed to the uncertainty as regards price structure by Peruvian canners for solid. It appeared difficult to believe that prices lower than $5.75 fob. would be acceptable to any packer, and consequently it was believed that rock bottom prices for solid had been, at that time, established.

On the other hand, demand for Flake pack remained steady at around $4.40 fob. It is estimated that, except for off seasonal spurts of fishing which may be taken advantage of by a few open canneries, there will not be much further packing to speak of until August/September. It is hoped that the let-up will allow some of the packers to get a fair portion of their solid inventories off their hands and at the same time permit them to renew packing on or around September with a cleaner Bank position.

● A source of alarm and apprehension on the part of the Peruvian canning industries was the lack of demand from European countries, due to extremely low offers being made by Japanese exporters for canned tuna and Albacore. Japanese prices declined from $6.35 to $5.50 for 48½ solid, cif. European ports, at which level it was felt that Japanese canners and exporters were endeavoring to thrust on the European market their stocks of tuna at any price.

The Peruvian fisheries industry has developed its business over the past years solely on its own merits and efforts, without government assistance of any kind. On strictly commercial basis, it has been able to meet Japanese competition. They are now faced with a situation which they believe suggests that subsidies were being granted to exporters and/or canners, a principle that the Peruvian industry is loath to adopt and follow.

Pacific Coasters Prominent As NFI Committee Chiefs

Knowing them well, Aldo Casaretto of Los Angeles, president of the National Fisheries Institute, picked nine Pacific Coast fish men as chairmen of N.F.I. committees for 1957-8.

These chairmen include:

Legislation—Lloyd Turnacliff, Meredith Fish Co., Sacramento;

Quality—E. A. Ruthford, San Juan Fishing & Packing Co., Seattle;

Resolution—Dean C. Kayler, Kayler-Dahl Fish Co., Petersburg, Alaska;

Convention, 1958—A. L. Levy, Washington Fish & Oyster Co., San Francisco;

Ethics—Elmo C. Jack, broker, Los Angeles;

Packaged Salmon—Rufus Littlefield, Seattle Seafood Co., Seattle;

Smoked and Cured Fish—Louis Vitale, Los Angeles Smoking & Curing Co., Los Angeles;

Weights and Measures—Palmer Olson, New England Fish Co., Seattle;

Statistics and Reports—Henry H Goodrich, Goodrich Brokerage Co. Phoenix.

Above—
Picking tiny pink California shrimp in the F. Alioto plant at Fishermen's Wharf, San Francisco.

How Alioto Steps-Up Shrimp And Fish Packing Operation

● One of the most modern of northern California's mechanized fillet lines is now set up in Plant No. 2 of the F. Alioto Fish Co., Fishermen's Wharf, San Francisco.

The equipment was designed by Mario F. Alioto, son of Frank Alioto, president and general manager of the concern, with help from Mario's uncle, Tom Lazio, vice-president of F. Alioto Fish Co., and president of the Tom Lazio Fish Co., Eureka..

As trawlers make fast to the company's dock, their boxes of iced and sorted fish are hoisted to the dock via electric winch, and their contents deposited into an electric-powered conveyor hopper. This conveyor with its rubber belt takes the fish into the filleting room, after they have been thoroughly washed in a trommel screen.

Stations are provided for 16 filleters. As the fish comes into the filleting room it is diverted to any of the 16 filleting stations by automatic drop-offs (paddle-like arrangements that shove fish, as it is needed on to the filleting tables, from the rubber conveyor belt).

The filleters fillet the fish under running water, and the fillets are washed again in a stainless steel tank, and drained on a stainless steel screen.

Quality control as advocated by NFI Guide Lines is practiced throughout the operation, with fish iced all the way from the time they're caught until they are packaged. Fish are all processed the same day they are unloaded, according to Mario Alioto.

Fillets that are to go to the fresh market are packed in 20-lb. American Can Co. fillet cans, and are trucked out iced to fresh fish markets.

A quantity of fillets are packed in 10-lb. cartons, lined with cellophane, and are frozen for the Army.

The new fillet plant has a capacity of 25,000-lbs. of sole and 50,000-lbs. of rockfish per day.

Not only has the F. Alioto Fish Co. the first mechanical filleting line in the San Francisco Bay Area, but the company in Plant No. 3 has the largest Pacific ocean shrimp processing plant around the Bay.

Heading up operations of the

Fillet Line recently installed in F. Alioto plant in San Francisco.

Shrimp Meat is being weighed into American Can containers for vacuum refrigerated pack

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WC1: Water-cooled, one-cylinder, 4-cycle, 7 BHP @ 1800 RPM

WC2: Water-cooled, two-cylinder, v-type, 4-cycle, 15 BHP @ 1800 RPM

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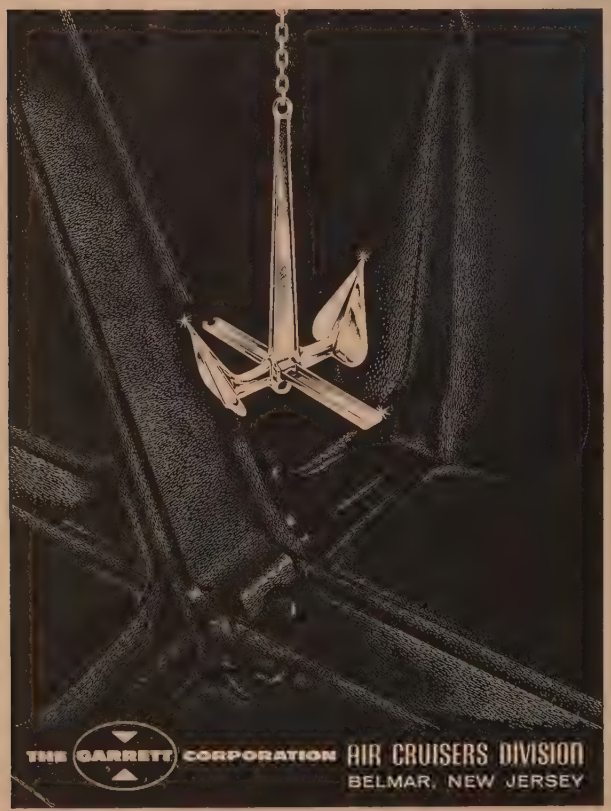

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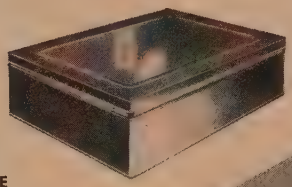


THE NEW STERN FILLET CAN

STERN A GOOD CAN NAME SINCE 1901

STERN CAN

STERN CAN COMPANY INC.

71 LOCUST ST., BOSTON 25, MASS.

shrimp plant is Sal Cecilio, formerly the owner of the Monterey purse seiner *San Vito*. Shrimps are trucked down iced from Bodega Bay, where they are landed by the shrimp trawler *Verona*, Capt. Walter Lucas.

Shrimps are cooked in a 500-gal. tank for five to six minutes in batches of 200-lbs. They are brailed out into wire baskets and taken in racks via fork lift truck to the picking room, where they are picked by hand.

The season started May 1, and when *Pacific Fisherman* visited the plant some 12,000-lbs. of shrimp were being processed daily, the same day that they are caught. The cooked and peeled shrimp are packed in American Can Co. 5-lb cans under the Shelter Cove brand and vacuum closed on a Canco closing machine.

The cans are packed in 30-lb shipping cartons and distributed via refrigerated truck.

Right—
Mario Alioto, left, general manager, F. Alioto Fish Co., and Tom Lazio, vice president.

Officers of the F. Alioto Fish Co. are Frank Alioto, president; Sal Tarantino, and Tom Lazio, vice-presidents; and Mario Frank Alioto, son of Frank Alioto, general manager. Mr. Lazio is also president of the Tom Lazio Fish Co., Eureka.

Ocean-Pink Shrimp Trade Rockets on Grays Harbor

● Rising like a rocket, Washington's brand-new Ocean-Pink shrimp business for the year topped 1 million pounds early in July and seemed bound to beat 2 million for the year, if the "bugs" remain available.

This will be in marked contrast with 71,327 lbs. landed for the entire year 1957; and it is expected that Washington will take first place from California, where the new fishery had had several years head-start.

Oregon tried shrimping a couple of years ago but, although the shellfish were found quite abundant over suitable bottom, difficulty in peeling and marketing resulted in suspension of the operation.

In Washington, volume followed the introduction of one, and then another, machine produced by The Peelers Co., New Orleans.

● Four boats are fishing on the grounds 4 to 28 miles off the Washington coast and about 95 miles north-and-south from Grays Harbor to Carroll Island. Shrimp are found at depths ranging from 60 to 85 fathoms.

Increase in production caused the Kaakinen Fish Co. in Westport to install a second shrimp peeler in June and the firm can now turn out 35,000 lbs of shrimp ready for canning in one day. Picked and peeled shrimp, about 30 to a 4½-ounce (tuna size) can, represent about 20% of the landed heads-on weight.

Ivar Wendt, Seattle broker who is distributing the canned shrimp, says all of the production is being sold on the Pacific Coast and that the market can take more of the "cocktail-size" shellfish.

Success of the fishery has caused other processors to view the shrimp as a potential source of supply, with both Willapa Bay and Astoria people said to be interested in renting peelers and beginning canning operations.

Presence of the shrimp in commercial quantities has long been known but production was not profitable until the shrimp peelers were brought in because of the high labor cost of hand cleaning and peeling the small shrimp.

The fishery, however, did not come about by chance. The Fish and Wildlife Service research boat, the *John N. Cobb*, located the beds in trawling surveys in 1955 and 1956, confirming that they might be of commercial quantity. Then the Kaakinen company, in association with Mr. Wendt, brought the shrimp peeling machine from New Orleans and the fishery was underway. The peeler, manufactured by The Peelers Co., is not sold outright but is leased.

● In November, 1956, the Department of Fisheries held hearings on the ocean fishery and set up regulations permitting a year-around season.

The shrimp are taken with a Gulf of Mexico-type trawl, which is more efficient than a beam trawl. Net used is 1½" stretch mesh size. The Gulf trawl is technically an otter trawl, but differs from the West Coast type in that its doors are tied close to the wings of the net. This prevents herding of fish toward the mouth of the net, producing relatively clean shrimp catches. Fish caught in the small-mesh shrimp trawls must be returned to the sea.

Boats have been averaging around 11,000 lbs of shrimp per day, but the trawler *Shirley Lee* brought in 64,000 lbs in one three-day voyage in June. Fishermen are paid 7c per pound for the shrimp.

Bob Robison, supervisor of the statistics section of the state fisheries agency, says total catch of ocean shrimp at Westport up to June 30 was 982,685 lbs, with 448,905 lbs landed in June. Total statewide production in 1956 was only 71,327 lbs (chiefly from the new fishery) and total in 1955 was 8,248 pounds; in 1954, 21,557 pounds. Biggest year previously was 1951, with 108,000 pounds landed, all from inside waters.

California's ocean shrimp fishery began in 1952, with catch that year of 206,000 pounds, which climbed to 1,150,000 pounds in 1956. Eight boats were out last year, with bulk of catches landed at Crescent City and Bodega Bay.

Robison said shrimp production in Elliott Bay and Hood Canal, where shrimp are caught in pots or ring nets, has also increased this year. Puget Sound shrimp are usually the stripe or spot varieties, larger than the Ocean Pink shrimp.

Joe DeVincenzi, formerly with Henry Dowden Co., San Francisco seafood brokers, is now with California Shellfish Co., Fishermen's Wharf, San Francisco.

Canadian Fishing Fat

● Although British Columbia salmon fishermen went on strike for higher prices in June, during the previous month their earnings for landings totalled $423,000, with trollers taking more than 95% of the catch. Fraser River gillnet fishermen caught 104,000 lbs.

Fish landings of all kinds in British Columbia were worth $1,855,000 in May, according to the Canadian department of fisheries.

Halibut fishermen topped the list with a total catch of 7,640,000 pounds valued at $1,116,000. Of this total more than 1,100,000 pounds of halibut was caught in international waters off Alaska.

Better than 1,500,000 pounds of salmon were landed during the month. Grey cod landings totalling 900,000 pounds, worth $38,000 were double those of the previous May's fishery, but sole landings of 469,000 pounds, valued at $27,000 were only half last year's May production. Ling cod continued in good supply with total landings of 614,000 pounds valued at $41,000 but unit prices were down from last year and fishermen, mostly hand-liners from the Gulf of Georgia area, received about $6,000 less than in 1956.

Early summer herring fishing yielded a total of 3400 tons worth $106,000. Clam and shrimp landings were lower, but shrimp landings of 110,000 pounds nearly doubled last year's May figure.

Britain Will Not Free Salmon of Quotas

The United Kingdom government has rejected an appeal to remove import restrictions on canned salmon.

The issue was raised in the House of Commons when Conservative member Eric Johnson declared it was "undesirable" for Britain to spend so much money on Japanese and Russian salmon in view of the supplies available from Canada.

However, Derek Walker-Smith, a spokesman for the Board of Trade, a government department, said that salmon imports must be controlled to conserve dollar balances for more essential purchases.

In the 12-month period ending next January, said Mr. Walker-Smith, the canned salmon quotas are £3,500,000 from North America and £1,000,000 from Russia. Imports from Japan, ending next September 30, will total £4,890,000.

For North America, the United Kingdom allocated £3,000,000, although the short supply prevented the country from getting all that was asked for in British Columbia. Of the canned salmon bought by Britain on this continent last year about 80% was from British Columbia, 20% from the U. S., mostly in Alaska Red talls.

Tuna Are Travellers

Tuna tagging by California's Department of Fish and Game has again demonstrated that the nomadic tuna is one of the widest ranging species in the Pacific Ocean.

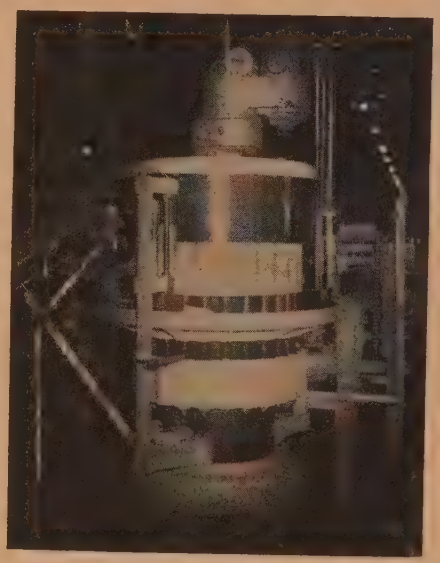
A Yellowfish tagged March 8, 1957, off Acajutla, El Salvador, was caught two months later off Manzanillo, Mexico, 900 miles away.

Tuna tagged by the department have been recovered in mid-Pacific and as far west as the coastal waters of Japan.

Yandell Joins Calpak

Harold U. Yandell, for the past 10 years superintendent of San Xavier Fish Packing Co., Monterey, Calif., is now associated with the California Packing Corporation, looking after certain of that company's interests in Southwest Africa.

The PAK-FORMER



Leading tuna canners are now using the PAK-FORMER for their Chunk and Grated Style Packs. A variable speed drive permits filling speed adjustments of between 140 and 250 cans per minute. Available to the industry under similar terms as our PAK-SHAPER.

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FOOD FISH MARKETING

ection of PACIFIC FISHERMAN--

News and Views of National Trade in Fish and Shellfish

August, 1957

One Thing Sure: Halibut Pack Will Set No Record This Year

Halibut operations were slipping viftly toward the season's close at esstime with the apparent probaility that the pack in storage at the id would be smaller than in recent ears. There are several contributing ctors.

1. Area 2 was closed right on the uota. No excess there. The Internaonal Halibut Commission's staff had eir pencils needle-sharp when they gured that one.

2. There will be no second season Area 2-a this year with its time mit but no quota on catch. That ways presented an uncertainty, hich does not prevail this year.

3. While there's an extra season in rea 3-b, it will be late, and this aves a probability that it won't be o attractive to the fleet.

4. "Pull-out" of halibut vessels to lmon charters and seining and Alacore fishing was heavier than usual is summer, with the result that the rea 3 operations fell sharply after e middle of July.

• Prices have edged up as the prospects of heavy production paled out. This was true of the early sablefish deliveries as well as halibut, for blackcod was commanding around 17c at presstime.

Mild Cure Splitting Shows Sharp Up-Swing

Mild cure salmon packing was active during the early season, with better-than-usual fishing in the Puget Sound and British Columbia regions, and fair in Alaska.

Estimates by best-informed observers to the first of July showed about 1,100 more tierces than had been split to the even date in 1956. Total to July 1, this year, was set at about 2,775, of which Alaska had approximately 1,000; Seattle 1,085; British Columbia 230; Oregon 70; and California near 400.

Active packing at comparatively high prices left the buying trade restive and complaining.

Bolstad's "P. F." Advertising Results in Overseas Business

• Advertising in *Pacific Fisherman* is given credit for organizing of the new export division of Bolstad Sales & Service, San Pedro, which is fast matching the domestic department in sales, according to Sam Bolstad, head of the firm.

Important shipments to South Pacific ports, Chile, Ecuador, Costa Rica, and Peru are common, but Baja California, closest home of all, is producing its share of logistic difficulties.

Recently called by D. E. Ahern & Co., representatives for Exportadores De Sal, to survey an extensive diesel powered installation at a remote point on the barren peninsula, Mr. Bolstad spent seven days on a tacos and frijole diet while supervising overhaul and setting up operating and maintenance procedures for the entire plant. Only respite from the diet Mexicano was a midweek steak dinner aboard the upper Columbia River towboat *Quenette*, serving as dredge tender on the job.

The first Bolstad advertisement inserted in *Pacific Fisherman* resulted in a $25,000 order from overseas, and produced the immediate decision to organize the export division, which is now pressing the domestic division close in sales volume.

"Sealady" Tunaburgers And Loins Introduced

Really new on the American market, frozen sugar-cured "tunaburgers" and "smoked tuna loins", are being introduced to the warm-weather American trade under the "Sealady" label developed for the Tuna Products Corporation, 130 Fulton Street, Boston, Mass.

The company is the American subsidiary of Nippon Reizo K.K., a Japanese corporation which is one of the largest fishing and freezing companies in the world. The Boston company operates under the direction of Dr. Yaichi Aikawa and Pasquale Fraticelli. Dr. Aikawa is a graduate of the Massachusetts Institute of Technology.

The processing method used in preparing the "Sealady" products is protected by American patent. Basically, the process is a cure which results in a ham-red and distinctive flavor.

Tunaburgers are sliced from a loaf pressed from chopped sugar-cured tuna loins. The "Sealady" loins offered in that form have been lightly smoked in addition to the basic cure.

Source of the tuna used in the products is not announced, although earlier statements indicated that the operations would provide an outlet for the large Bluefin tuna taken off the New England coast, which are not desirable for canning because their natural color is somewhat darker than that to which the canned tuna consumer is accustomed.

Sales of the "Sealady" items are being handled by McDonald and Quealy, Food Brokers, 177 State Street, Boston.

Japan Reports Albacore Sales to U.S. Packers

Sales of 10,000 tons of frozen Albacore to American canners during the second quarter of the year was reported by Tokyo late in July.

Largest buyer apparently was the Columbia River Packers Association, whose recent order of 1,550 tons lifted its total for 1957 to date to approximately 6,420 tons.

Westgate-California Tuna Packing Co. was reported as another large purchaser.

San Juan Technologist To Pursue Market Studies

Russell M. Boshell has joined San Juan Fish & Packing Company as food technologist and technical marketing assistant, according to a report by Lawrence Calvert, president.

Mr. Boshell comes from Oregon State College, where for the past two years he has been conducting a marketing study for the U. S. Fish & Wildlife service. This has involved a detailed study of the marketing of fish and shellfish products at wholesale and retail, and shows consumer prefernce and buying habits for these products.

Mr. Boshell is a graduate of Oregon State College in Fisheries and Food Technology, and in addition to to the U. S. Fish and Wildlife service has worked with Walla Walla Canning Company and Interstate Packers, and spent two years in Alaska in the Kodiak Island area. His recent study for the U. S. Fish & Wildlife Service includes all Pacific Coast Fisheries, but was limited to fresh, frozen, smoked and shellfish product dealing primarily with halibut, salmon, sole, rockfish and crab. This study shows the difference in the consumption patterns on the West Coast, and deals with the effects of quota and availability on total consumption.

Russell M. Boshell, who joins the staff of the San Juan Fishing & Packing Co., Seattle, as food technologist and technical marketing assistant.

"Since it has always been the practice of San Juan Fishing & Packing Company to consistently attain the highest standards of quality being produced, we are certain that the addition of Mr. Boshell, who in his own right is an expert food technologist and has a complete basic understanding of the marketing of seafoods in the Western States, will add a great deal to our overall practice of preserving and maintaining better quality and more effective distribution," Mr. Calvert stated.

Salmon and Tuna Sales Firm Moves Offices

B. Lou Thrailkill, head of Salmon and Tuna Sales Co., Seattle sales agents specializing in canned salmon, tuna and crabmeat, announced the July removal of the company's offices to 411 Seneca Street, Seattle 1, Wash. The telephone number remains unchanged: Seneca 5131.

Irving Rischall Joins Douglas Bowen Brokerage

Irving Rischall, one of the originators of the Southern California Fisheries Association and past treasurer, after being ill and hospitalized for over a year, is now affiliated with the Douglas Bowen Brokerage Company, located at 10 West Magnolia Blvd., Burbank.

Douglas Bowen Brokerage Company are brokers for San Juan Fishing and Packing Co., Cedergreen Frozen Pack Corporation and other frozen food packers.

Deming Picks Weismann

C. F. Weismann, head of Jones, Weismann & Co., prominent Boston food brokerage firm which long has specialized in salmon sales throughout New England, announced recently that his firm had been appointed sales representative in New England for Deming & Gould Co., marketing agency of Pacific American Fisheries, largest American salmon canning concern.

Richer Redder

"Packed with the Wiggle in its tail"

NEW ENGLAND FISH CO.
Seattle, Wash.
Since 1868
Producers ★ Packers ★ Distributors
Canned ★ Fresh ★ Frozen ★ Seafoods

Baffin Brand®...
There is a difference!
MOUNTAIN RAINBOW TROUT
Looks and tastes like Fresh Caught Rainbow Trout
National Sales Representative
Robert L. Stix, Inc., 260 West Broadway, N. Y. 13

They Add Up To A Lot of Sales!

Oceanic
SALES COMPANY
3302 SMITH TOWER
SEATTLE 4, WASH.

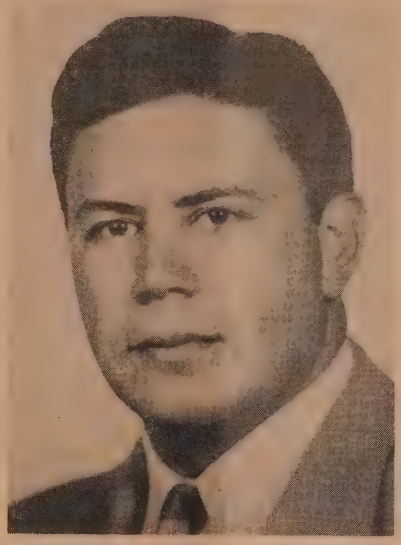
Gil Kuhn Heads New Ocean Garden Products

Ocean Garden Products, Inc., recently incorporated in San Diego, alif., is now handling importation of rozen shrimp from major Mexican roducers, as well as importing and xporting retail and institutional packs other fresh and frozen seafood roducts. The principal brand is *cean Garden,* nationally established a leader for frozen shrimp.

G. J. Kuhn is president and general anager of Ocean Garden Products, ith Dr. Joaquin Casasus, chairman the board; Sr. Jose G. Gutierrez id Sr. Rafael Nunez Colmenar, vice esidents; Sr. Jose Diaz Perez, treasrer; and Harold I. Lush, secretary. ther directors include Sr. Gaspar aragoza, Ing. Victor Pierre Mussio id Sr. Demetrio Delgado de Torres.

Assisting Mr. Kuhn on the San Dio staff are Joe Cranic, in charge of les; John Cretti, resident manager in exico; Jack Schmidt, traffic manger, and other personnel experienced the seafood field.

The company's shrimp products will clude 5-lb. institutional packs of ozen shrimp in shells, peeled and deveined, and peeled with vein in; 10-oz. retail consumer package, 8-oz. pack of peeled and deveined, 8 and 10-oz. packs of breaded shrimp, 5-oz. fried shrimp, 2½-lb. package of breaded. Other seafoods will include retail packages of perch, cod, halibut and sole, and institutional packs of sea bass (cabrilla) and halibut, California lobsters, red snapper fillets and fish sticks.



Gilbert J. Kuhn, president and general manager of Ocean Garden Products, Inc., newly-incorporated firm handling the import and sale of frozen shrimp from a number of major Mexican producers.

● Brokers who have represented Ocean Garden shrimp in principal markets throughout the country will continue their sales representation.

Present suppliers, all in Guaymas, Mexico, are: Armadores del Pacifico, S. A.; Cia. Maritima y Pesquera Mar Bermejo, S. A.; Industrias del Mar, S. A.; Sr. Porfirio Hernandez S.; Cia Costamex, S. A.; Cia. Rosamex, S. A.; Armadores Unidos, S. A.; Armadores de Guaymas, S. A.

Additional packers who will supply Ocean Garden Products starting in September, are: Pesquera de Topolobampo, S. A.; Refrigeradora Commercial de Culiacan, S. A.; Empacadora La Reforma, S. A.

Mr. Kuhn has been identified with the seafood industry for 10 years as assistant to the president of Marine Products Company. He is active in N. F. I. and Shrimp Association programs. He is a graduate of the University of Southern California, where he was football captain and All-American; and a lieutenant-colonel in the Air Force during World War II.

Philippine Import Duty On Canned Fish Revised

Downward revision of import duties on canned fish entering the Philippines is expected to encourage sales of the items most used by that area: sardines, mackerel, anchovies and salmon.

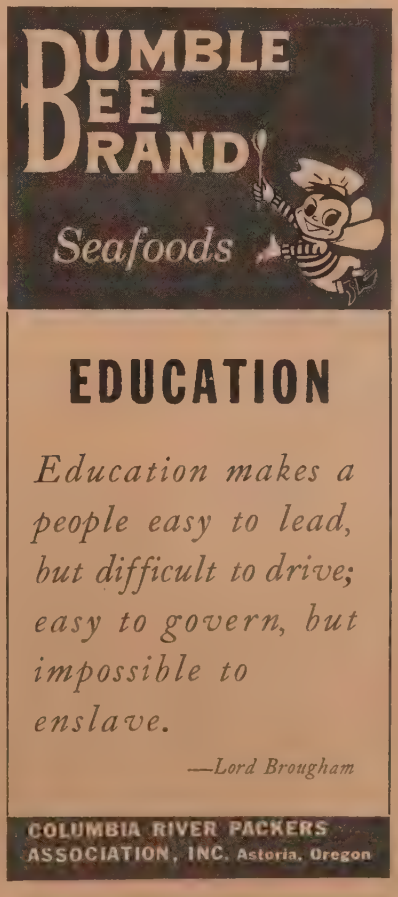
The new duty is set at 15% ad valorem, *but* until Jan. 1, 1959, the duty is reduced to 25% of the regular rate. Thus until that date the rate is 3.75%; and afterward it will be 7.5% for three years.

However, save for sardines, all items mentioned take an added 1% special import surtax, which is added to the regular duty.

Canned Sardine Quota Again Lifted by Japan

A second increase this summer lifted the Japan Export Canned Sardine Manufacturers Association's production quota for 1957 to 960,000 cases, basis of 48 lbs.

This action was taken because of improved fishing conditions and a stronger market outlook.


BUMBLE BEE BRAND
Seafoods
EDUCATION
Education makes a people easy to lead, but difficult to drive; easy to govern, but impossible to enslave.
—Lord Brougham
COLUMBIA RIVER PACKERS ASSOCIATION, INC. Astoria, Oregon

Tuna on TV Earns Sharp Sales Stimulus

Breast - O' - Chicken tuna's second nationwide TV "spectacular" in June 15 an outstanding success according to reports from audience measurement services and from brokers and dealers.

The hour-long "RCA Galaxy of Stars" outdrew programs on two other networks, it is reported. Top rating was made over such formidable competition as the Lawrence Welk show and two popular western dramas.

Said Harold Requa, Jr., sales promotion director for Breast-O'-Chicken tuna, "We anticipate an excellent consumer response which should boost the sales of Breast-O'-Chicken this summer."

"Thaw Indicator" Offered To Police Frozen Goods

A tell-tale device, small and cheap, which will show whether temperature of frozen fish has been allowed to rise above a pre-determined level in transit or storage is being introduced by Aseptic-Thermo Indicator Co., North Hollywood, Calif., manufacturer of the "Cook Chex" cards which prove when a basket or car of canned fish has been processed. The new tell-tale is called "Freez-Chex."

The "thaw indicator" consists of a small tube containing a yellowish chemical, the whole being enclosed in a tiny polyethylene bag. At normal temperatures the indicator is inactive. However, when it has been subjected to below-freezing temperatures for a period it is *activated*. When the temperature of the tube thereafter is permitted to rise above a specified level the color of the tube contents turns bright red.

Canned Salmon Week's

color layout is studied by L. A. Petersen, right, chairman of the industry committee, and Herald A. O'Neill, executive secretary of the Association of Pacific Fisheries, preparatory to the release of this August 23-30 promotion.

This is the first time that the canned salmon industry has observed the special week in summer, set the coming August to coincide with the arrival of the new packs of canned salmon from Alaska, Columbia River and Puget Sound canneries. Food editors of U. S. newspapers, television and radio have been alerted to the week with timely canned salmon recipe material, and a flood of recipe emphasis on canned salmon is set to develop.

Southern California Tuna Receipts

Cumulative totals for 1957 to July 6 for all deliveries from all sources. Data in tons. Previous years shown to nearest comparable dates. (Data from U.S. Market News Service)

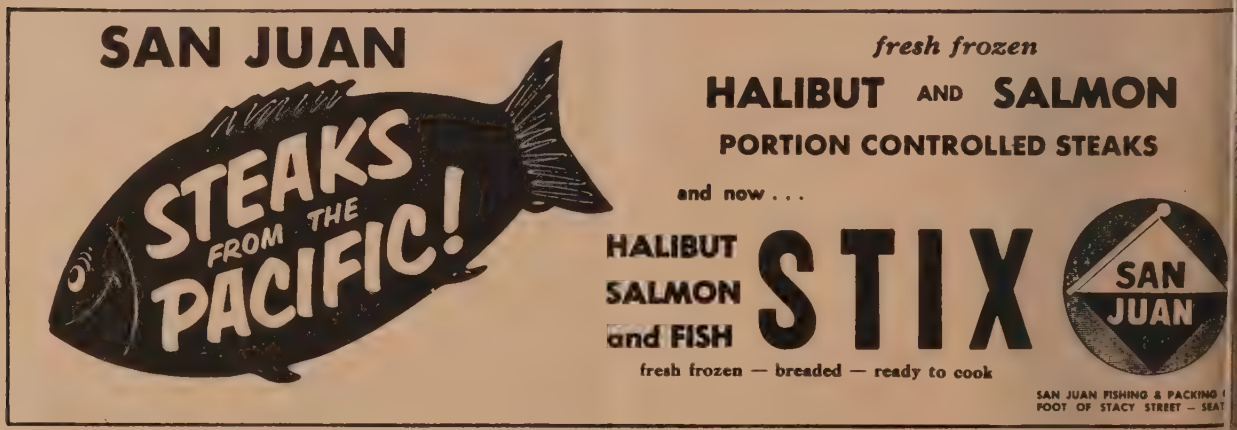
	Albacore	Bluefin	Skipjack	Yellowfin	Bonito	Yellowtail	Total
San Pedro	8,505	1,376	15,124	35,912	....	35	*60,95
San Diego	526	192	9,604	19,078	...	14	#32,98
Total 1957 to July 6	9,031	1,568	24,728	54,990	..	49	90,36
Total 1956	6,288	1,481	31,837	62,170	2	41	101,81
Total 1955	13,650	871	31,690	36,708	17	..	83,02

* Includes 22,258 tons of imported frozen tuna, 8,238 tons Albacore, 5,777 tons Skipjack and 8,243 tons Yellowfin.

\# Includes 1,735 tons of imported frozen tuna, 777 tons of Skipjack, 853 tons Yellowfin 105 tons unspecified.

80c Advertising Allowance Of Japanese Albacore

Tokyo Canned Tuna Sales Co., joint sales organization of Japan Export Canned Tuna Manufacturers Association, announced this summer tha a rebate of $0.80 per case will b made in favor of foreign trading firm who have actually made an expo deal in canned Albacore. The reba is specified as an advertising allow ance.



Wm. H. HUTCHISON
and
Associates

Fishing, MARINE & INDUSTRIAL SUPPLIES

Hutchison" brand
NARLON, LIVLON, NYLON
and COTTON FISH NETTING
MFG. BY "MOMOI"

Wire Rope FOR ALL PURPOSES

Main Offices and Warehouse
309 N. Pacific Ave. San Pedro, Calif.
Telephone Terminal 2-1155

AFFILIATE
Wm. H. Hutchison y Asociados S. A.
MEXICO — SOUTH and CENTRAL AMERICA

CHICAGO BUYERS "Phone FROHMAN for Fish!"
A COMPLETE SELLING ORGANIZATION

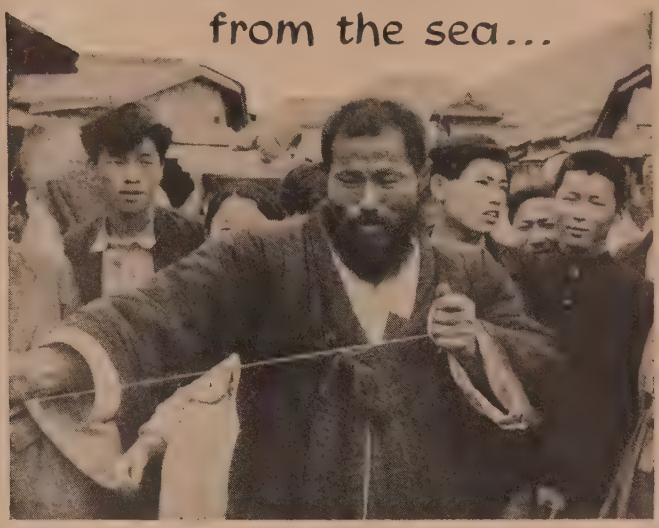
COMPLETE TRADE COVERAGE	50 YEARS OF SALES PROMOTION AND MARKETING EXPERIENCE	NATIONALLY RECOGNIZED HIGH STANDARDS OF SERVICE	SPECIALISTS IN BRAND BUILDING
RETAIL SPECIALTY WORK	CREDIT INVOICING AND TRAFFIC SERVICE	RECEIPT AND DISTRIBUTION OF CARS	CONSIGNED STOCK SELLING & RECORD KEEPING

H. FROHMAN & SONS Sales Agents
FOR PRODUCERS OF CANNED AND FROZEN FISH AND SEA FOODS
510 NORTH DEARBORN STREET CHICAGO 10

MILD CURED SALMON
CANNED SALMON
ICI-FRESH
BRAND
TRADE MARK
PACKED IN THE NORTH PACIFIC
Frozen SALMON AND HALIBUT
OXENBERG BROS., INC. BROOKLYN, N.Y. SEATTLE, WASH.
FRESH SALMON
FISH FILLETS

OXENBERG BROS., INC.
276-280 Metropolitan Ave., Brooklyn, N. Y.
Bell Street Terminal, Seattle 1, Wash.

That this fisherman's line may again wrest food from the sea...



STANDARD STEEL
builds 3 new Processing Plants for KOREA

THE PROBLEM: War-ravaged Korea—with all foods in short supply—looks to the sea for salvation. The Sea provides immediate food for hungry people... and fish meal used to fertilize the soil and for animal food... helps restore the agricultural and livestock economy. But, without fish canneries and processing plants to convert the spoils of the sea into edible foods, meal, and oil, the all-important Korean fishing industry is seriously hampered.

THE SOLUTION: Three modern Standard Steel fish processing plants—two canneries and a reduction plant to produce high-grade fish meal and fish oil. Thus, the fishing industry and the livestock and farming economy are given a much needed boost—a real step forward in Korea's return to economical independence.

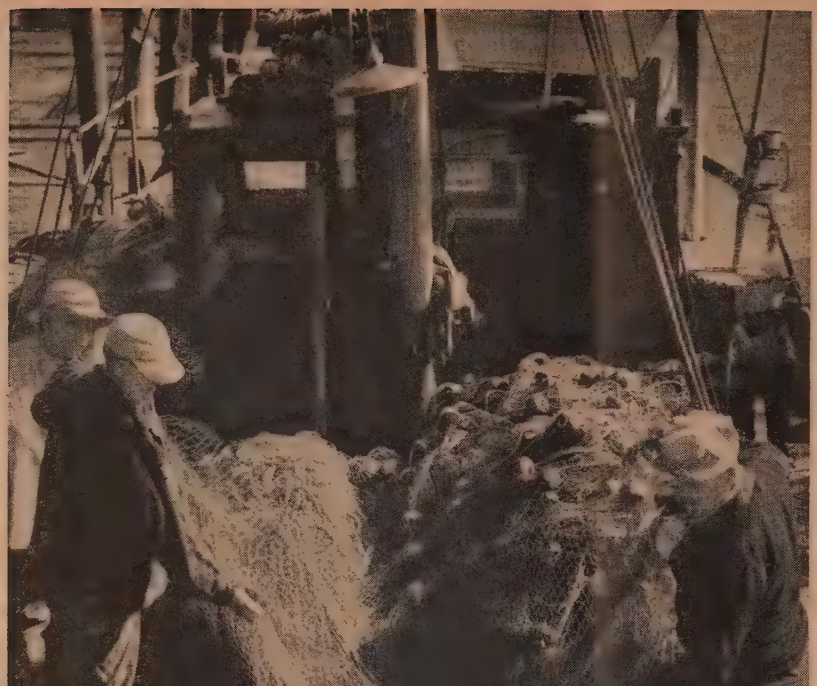
Superior Performance:
The Standard-Hersey fish dryer shown here produces 2% to 5% protein gain with 2½% more meal! Oil is low in free fatty acid... a big gain in product value!

Write For Information!

STANDARD STEEL CORPORATION
General Offices and Factory, 5013 Boyle Avenue, Los Angeles 58, Calif.

LEADER IRON WORKS
Midwest Offices and Factory
Decatur 13, Illinois

ROTARY DRYERS • KILNS • COOLERS • ASPHALT PLANTS



...what's the difference?

Gold Medal Netting is more than a combination of holes in the right places. A good net can mean the difference between profit and loss. That's why successful fishermen choose Gold Medal Netting. It has earned a reputation for catching and holding fish. Produced by a company which has been making fine netting for over a century.

- Gold Medal Cotton Netting
- Gold Medal Nylon Gill Netting

PLUS

- Nyak® Netting
- Barbour's® Bonded Nylon Seine Netting
- Barbour's Nylon Gill Netting
- Barbour's Double Knot Linen & Nylon Salmon Gill Netting

THE LINEN THREAD CO., INC.
116 NEW MONTGOMERY STREET SAN FRANCISCO 5, CALIF.

Pacific Coast Distributors

Marine Hardware Co.
304 Sardine Street
Terminal Island, Calif.

Cincotta Bros.
203 Alvarado Street
Monterey, California

Marine Hardware Co.
509 Beacon Street
San Pedro, California

SAN DIEGO
Marine Hardware, Inc.
1520 India Street
San Diego, Calif.

Marine Hardware Co.
Co-operative Bldg.
San Pedro, California

Cincotta Bros.
169 Jefferson Street
San Francisco, California

Oregon Marine Supply Co.
235 S. W. First Avenue
Portland, Oregon

Pacific Fishing & Trading
1403 W. 45th
Seattle, Washington

Pacific Marine Supply Co.
1217-1223 Western Avenue
Seattle 1, Washington

MAKERS OF FINE NETTING FOR OVER A CENTURY

B. C. Packers Pick Gerrard for Big Job

Several appointments in the B. C. Packers organization designed to improve efficiency of the company's frozen and packaged operations have been announced by Ken Fraser, vice president, production, at Vancouver head office.

"It has been our objective for some time to delegate one person whose responsibility would be the organizing, planning and direction of the processing of our frozen, packaged, smoked and cured products," said Mr. Fraser.

Neville Gerrard, who has been manager of the company's operations at Victoria since 1951, has been placed in charge of the new department created to carry out the program outlined by Mr. Fraser.

Mr. Gerrard has been associated with the fishing industry for many years and has held several responsible positions with B. C. Packers. He was manager of the Prince Rupert operations from 1948 to 1950 before going to Victoria. His background and knowledge of the cold storage plant will be of considerable advantage to him in his new post.

Charles H. St. Denis has taken over the management of the Victoria operations of the company and will be directly responsible to Mr. Gerrard. Mr. St. Denis has spent some 30 years in the industry and since 1947 has been manager of the Canadian Fish & Cold Storage branch in Vancouver.

William R. Murdoch has been appointed assistant manager of the Clark's Harbor operations directly responsible to Roy Lambie. He has spent much of his life in the fishing industry as a fisherman, packing plant and co control operative, holding the latter position at B. C. Packers' Imperial plant at Stevenson during the past three years.

Bering King Crab Pack Of "Tokei" 59,850 Cases

The Japanese canneryship *Tokei Maru* headed for home early in July with a pack of 59,850 cases, basis of 48 halves. Having filled her target quota, she left the Bering Sea ground about one month earlier than usual.

As a whole, the Japanese crab operations have found excellent fishing this year, and all vessels were expected home with full quotas somewhat earlier than usual.

To July 10 the several ships had *Tokei Maru*, 59,850 cases; *Yo Maru*, 77,587 cases; *Kaiyo Maru*, 6 139 cases; *Hakuyo Maru*, 64,5 cases; *Shiranesan Maru*, 57,158 case TOTAL, 319,284 cases.

ansamerica's President ins C.R.P.A. Directors

)ne of the outstanding figures in S. financial circles became a direc- of the Columbia River Packers As- iation in July with the election at oria of Frank N. Belgrano, Jr., San ncisco, chairman of the board and sident of Transamerica Corpora- , and a former president of the t National Bank of Portland.

Belgrano is well acquainted with thwest industrial activities and po- ials and has closely followed the elopment of the local company.

ssuming the chairmanship of the rd will be Ted R. Gamble, Port- l, who has been active in North- t business circles since 1929. Mr. nble is president of the Mt. Hood io & TV Broadcasting, and presi- t-owner of the Gamble Enterprises Washington, operators of TV and o broadcasting facilities in Wash- on, Oregon and California. He is irector of Transamerica Corpora- and was recently elected a direc- of Northwest Airlines. He has n a member of the CRPA board the past five years.

esigning as C.R.P.A. chairman and director is J. Wendell Coombs, a nsamerica Vice President, who will over duties as vice president of eral Metals Corporation of Oak- l, a Transamerica subsidiary. Mr. mbs served as a member of the .P.A. board for the past 11 years as chairman since 1952.

ewly elected as director was Wen- Wyatt, prominent Oregon attor- and Astoria resident, who has the company's legal representa- for the past few years. Mr. Wyatt fill the board vacancy occasioned he death of Floyd Wright.

ther board members are T. F. San- W. B. Wootton, E. F. Slade, Jay erman and Malcolm MacNaugh-

a brief statement, following the ting, Mr. Gamble declared the pol- relative to company operations h have prevailed during the last de, a period in which the com- has enjoyed steady growth, will ontinued in the future.

F. Sandoz, president, announced company sales for the first six ths of 1957 were ahead of those he same period in the preceding and that packing operations were wing a normal pattern.

Nigro to Westgate

mes Nigro, son of Victor Nigro, dent of the Southern California ermen's Association, has joined Westgate-California Tuna Packing as cleaning department foreman.

B. C. Packers' Sales Peak But Net Takes Nose-Dive

• Sales made by B. C. Packers, Ltd., last year reached a new high level, $52,227,616, but the economic condition of the industry was reflected in the fact that net income was the lowest with the exception of the loss year of 1953, in 21 years.

"In the light of market experience with canned salmon and with fresh and frozen products," states John M. Buchanan, chairman of the board, "it has been proven that the keen competition for raw supplies has forced the cost of these beyond the level at which they could be processed and sold at a profit."

Consolidated net income of the British Columbia fish packing giant, amounting to $577,679, represented 1.1c on each dollar of sales.

• An unusual factor influencing reduction in net income was the discount on U. S. funds, which slashed sales realization for the company's exports to the U. S. by about $230,000.

The company has been encouraged by expansion in sales of packaged frozen sea food under *Rupert* brand, now packed in 10 company-operated locations—five in B. C., two in Nova Scotia, and one each in Los Angeles, Seattle and Manitoba. The Los Angeles operation, as previously reported in *Pacific Fisherman,* also produces the "Certi-Fresh" brand of prepared fish products which are distributed principally in southern California. A gratifying feature of the packaged fish operation has been the growth of the Canadian market for those products, with retail food organizations steadily enlarging their facilities for displaying and selling frozen food.

Booth Fisheries Profit Dips While Sales Peak

Slight decline in net profit despite the largest volume of business in the company's history was reported by Robert P. Fletcher Jr., president of Booth Fisheries Corporation, for the year ending April 27.

Sales and revenues totalled $46,715,004 for the year, up $3 million over the previous year's record. Net income of $725,627 was second highest the company has recorded.

Booth this year discontinued distribution of frozen fruits and vegetables and once again is concentrating its business wholly on fish and shellfish.

Bendiksen Buys Leage

Leage Oyster Co., Willapa Harbor, Wash., was sold to E. H. Bendiksen Co., South Bend, Wash., by Mr. and Mrs. George Leage.

Orville Leage, who was managing the plant, has moved to Morro Bay, Calif., where he is managing the El Morro Oyster Co. with his parents, who came to Morro Bay in 1954.

The El Morro Oyster Co. is building a new opening plant at waterside 106 x 20'. It is also constructing a new 40 x 14' steel scow for the harvesting of oysters.

Trutanic to Europe

Nick Trutanic of Star-Kist Foods, Inc., Terminal Island, left for Europe on July 18 on company business concerning his firm's South American holdings.

Sinaloa Fish Cannery Planned in Mexico

Srs. Jorge Palma, Rafael Lacambra and Marco-Antonio Espinoza, directors of Empacadora de Conservas de Los Mochis, Sinaloa, Mexico, spent several days in San Diego last month making a survey of the West Coast fishing industry and investigating costs for fish canning machinery. They plan to build a fish cannery in the state of Sinaloa to pack sardines, mackerel and tuna for Mexican consumption. Empacadora de Conservas de Los Mochis at present packs tomatoes and other vegetables under the brand name of *El Fuerte.*

Venezuela Plant Equipped

Universal Canning Machinery Co., Pacific Grove, Calif., has delivered a fish scaler, a packing table and a used boiler to Compania Anonima Industrial de Pesca, Cumina, Venezuela, according to Ray Bentley, owner of Universal.

Buchanan Follows Lane To Advertising Agency

Jack Buchanan, direct sales manager of Westgate-California Tuna Packing Co., San Diego, has resigned his position to join the Barnes Chase Co. advertising agency as account executive.

Barnes Chase Co. is headed by James B. Lane, former president of Breast-O'-Chicken Tuna, Inc., a subsidiary of Westgate-California Tuna Packing Co.

Anti-Biotic Fish Study By Dealers Advocated

The possibilities of using anti-biotics to extend the freshness of fish were described before the July meeting of the Northern California Seafood Institute in San Francisco by Al Levy, Washington Fish & Oyster Co. of California.

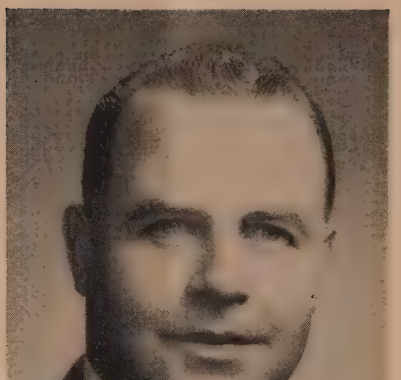
Mr. Levy told the group of 40 members and guests of his work with Dr. Lionel Farber, Hooper Foundation, University of California, San Francisco, on tests in extending the freshness of fish at the processor level.

He said that these tests, using aureomycin, show that fillet of sole, for example will keep fresh in an ordinary refrigerator at 42° for 12 days, after being dipped in a solution of five parts per million of the anti-biotic, and in a 5% brine solution. If treated at the fisherman level, Mr. Levy said fish would keep considerably longer.

Mr. Levy is trying to interest individual fish firms in the financing of the work of one graduate student, working under Dr. Farber, to go ahead with more experiments so that a mass of evidence will be compiled to convince the Pure Food & Drug Administration that the use of anti-biotics in the preserving of fish would be permissable. It would cost about $5,000 per year for the work of such a graduate student, Mr. Levy says.

John G. Martin, fish broker, chairman of the committee on public relations, presented his program for a sustained public relations program. Some of the points covered by Mr. Martin's recommendations were: an information service for restaurants, grocers, consumers, press, etc.; a monthly news letter to the above; more adequate publicity in the press; liason with fairs, conventions, exhibitions, etc., and the development and maintenance of display material.

It was agreed that Lloyd Turnacliff, Meredith Fish Co., president of the NCSI should appoint a committee to study and give full consideration, including a cost analysis to the suggested program.



R. M. Douglas, widely known in the Pacific fishing industry, particularly in Alaska, of which he was in charge of sales for Standard Oil Co. of California for a number of years, advanced recently to the position of San Francisco regional manager, wholesale sales, where he succeeded **W. A. McAfee,** raised to assistant general manager for wholesale sales.

Monterey Packing Squid

Five Monterey Bay fish canneries were packing squid last month, but none had packed anchovies, due to a scarcity of that fish in the area.

The companies packing squid were: Santa Cruz Canning Co., Moss Landing; Enterprise Packers, San Xavier Fish Packing Co., Carmel Canning Co., and Hovden Food Products Co., Monterey.

Fishermen were getting $30 per ton for squid, and the price to canners was reported to be $3.50-$3.60 per case. It was expected that the pack would be around 250,000 cases which is less than last season.

John Albertoli, San Francisco canning machinery manufacturer, delivered an Albertoli can unscrambler for flat cans to Japan for installation on a Japanese floating cannery.

B. & V. Fisheries Enters Monterey Wholesale Trade

Frank Brebes, Frank Brebes Ab
lone Co., Morro Bay, and John V
erra, Monterey, have formed the
& V. Fisheries at Monterey.

The partners are putting in a 1
25′ sharp freezer in part of the o
Monterey Canning Co. building. He
crab meat, prawns, abalone, a
cooked and peeled shrimp will
handled, with Mr. Vierra distributi
these sea foods out of this plant.

Mr. Brebes will continue with h
Morro Bay operations. He has pu
chased the Alden Fish Market on t
Morro Bay waterfront, and has add
a 40x80′ addition as an abalone pla

At the present time he has eig
abalone diving units working for hi
At the new plant he will carry a co
plete line of seafoods which he w
distribute in the area.

Emil Urell Dies

Emil Matt Urell, for many yea
an active figure in the Columbia Riv
fishing industry, died at Astoria
July after a fortnight's illness wi
heart trouble. He was 66.

Of recent years he had been le
active in the fish business, devoti
himself largely to his fur farm ne
Astoria.

As a young man he worked f
many years with the Union Fishe
men's Cooperative Packing Co.; a
later served Seattle and New Yo
firms in the mild cured salmon fie
in which he specialized, and in whi
he occasionally operated on his ow
account.

Harry Vance Passes

Co-workers of Harry Vance, 7
former traffic manager of Westgat
California Tuna Packing Co., mour
ed his death in June.

Veteran of World Wars I and
Mr. Vance retired as a Navy chi
petty officer in 1929 to work for t
old Sun Harbor Packing Co., pred
cessor of Westgate-California.

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LINES and LEADERS

idewater Oil Shifts Vestern Sales Set-up

Tidewater Oil Company's 7-state and awaii western marketing department has ade major changes in its administrative tup and shifted a number of sales perinnel to man the revised functions.

The most important changes are the tablishment of two new marketing disicts, one with headquarters in Fresno d the other based in Portland.

The new Fresno district comprises terriry formerly administered by the Sacraento district manager and part by the os Angeles sales chief.

The new Oregon district includes Oreon and Idaho. These states, combined ith the State of Washington, formerly mprised Tidewater's Northwest district nder D. J. Smith in Seattle. Mr. Smith ill remain in charge of the Washington istrict.

E. C. Heinz, formerly in charge at Settle, will head the Fresno marketing disict. He has been with the oil company various sales positions for 37 years.

Albert H. Zinkand of Seattle will be ief of the new Oregon district. Zinkand as been assistant marketing manager of e Northwest district in Seattle for the ast year.

win Disc Offers New emote-Controlled Take-off

A new air-operated, remote-controlled iction power take-off has just been anounced by the Twin Disc Clutch Comany, Racine, Wisconsin.

This new power take-off is available for se with engines up to 600-hp output in ny application where a standard power ke-off is used.

incotta Adds Marine-Tex

Marine-Tex, a product manufactured om expoxy resins, reinforced with metal lloys and a series of other plastic maerials, for heavy duty service is now eing distributed in northern California y Cincotta Bros., marine supply and quipment house, Fishermens Wharf, San rancisco.

According to Mr. Cincotta, Marine-Tex a single versatile material that licks ny repair problem from a cracked engine ead to a damaged leaky hull. The maerial is said to handle like putty, harden ke steel, and sand like wood.

It may be used in ⅛ inch thickness to einforce wood hulls, and may be used plug holes, patch cracks, etc.

Marine-Tex is manufactured by Travaco aboratories, 233 Condor St., East Boston , Mass.

aterpillar Enters Australian ield With New Plant

Caterpillar's new plant in Melbourne, ustralia is "progressing well," the Comany's chairman of the board reports llowing a two-month tour of Australia nd other Pacific areas.

The Company now occupies a preferred osition in Australia, said Louis B. Neuiller, and "We feel assured that our elbourne facilities, as well as our dealrs, will enable us to continue to grow ith the Australian economy."

Mr. Neumiller, and William Blackie, xecutive vice president, visited Caterllar dealers and customers in Hawaii, he Fiji Islands, New Zealand and Ausalia on their tour.

The long-term business outlook in Ausalia is particularly impressive, the hairman reported.

Michigan Wheel Co. Expands Into Large Propeller Field

Michigan Wheel Co., long a major producer of propellers for the smaller fishing boat field, announces completion of its 12-month program of expansion into the field of larger sized propellers, with shipments now being made through 72" diameters, and with its service department reconditioning propellers through 84" diameters.

Company officials point out that propellers up to 72" diameter are currently being produced in 3, 4, and 5-blade designs and that all styles are available in stainless steel, cast steel, Michalloy K bronze or Michalloy XX bronze. As in the smaller propeller field, emphasis is being placed on "machined pitch" accuracy and service. For additional details, write Michigan Wheel Co., Grand Rapids 3, Michigan.

Fairbanks-Morse Shifts Vice Presidential Staff

Robert H. Morse, Jr., president of Fairbanks, Morse & Co., has announced reassignment of three Vice-Presidents and the promotion of other executives.

Reassigned are: Robert H. Morse, III, from vice president in charge of sales to vice president in charge of budgets and planning; V. H. Peterson, from vice president in charge of engineering to vice president in charge of sales; John A. Cuneo, from vice president and assistant to the president to vice president in charge of foreign operations. Mr. Cuneo will be in charge of the company's Canadian and Mexican operations as well as its export division.

John C. Elmburg, assistant general sales manager, was promoted to general sales manager.

Tuna Clipper Bearings Featured in Bulletin

The B. F. Goodrich Industrial Products Company announces the release of a new engineering data bulletin (Number 482-A) on Cutless rubber propeller shaft bearings through Lucian Q. Moffitt, Inc., of Akron, national and international distributors and engineers of Cutless bearings.

The bulletin contains tabular dimensional data covering Cutless bearings from 6 inch through 15 inch diameters which embraces the range of sizes ordinarily suitable for tuna clippers and other large fishing vessels, tankers and freighters.

Bendix Marine Adds New Chief Engineer in Stan Swales

Stanley Swales has joined Pacific Division of Bendix Aviation Corporation as chief engineer of the marine department, it was announced by Walter P. Rhea, Marine manager.

In his new position, Swales will be in charge of the design and development of new marine products, as well as improvement of existing products which include marine radar, automatic pilots, depth recorders, depth indicators, radiotelephones, transmitters and receivers, radio direction finders, portable electric generators and electric outboard tachometers.

Exide Names Howard Coffey Supervisor in Marine Markets

Howard J. Coffey has been appointed supervisor of marine and emergency lighting markets for Exide Industrial Division of The Electric Storage Battery Company, Philadelphia.

With offices in the company headquarters there, Coffey is in charge of engineering sales nationally of Exide batteries and related electrical equipment for marine and emergency lighting applications.

Shore Line Diesel Maintenance, Foot of Jones St., Fishermen's Wharf, San Francisco, has developed this automatic pilot control relay unit, sturdy and inexpensive, that will keep a boat on a straighter course, and is faster acting in a following sea, according to officials of the company. The unit will interchange with most existing control units, has no dynamotor or B batteries, but uses transistors. It is said that the unit will make the automatic pilot react to the slightest movement of the boat.

Edward Meier to Direct Standard Steel Advertising

Edward J. Meier has been named to the newly created post of advertising manager of Standard Steel Corporation, Los Angeles, by Robert S. Burns, president of the company.

Mr. Meier, who joined Standard Steel last September as director of public relations, had come west from New York where he was part owner and editorial executive of Industry Publications. Prior to that connection he had spent seven years with the American Cyanamid Company at Rockefeller Center, serving as assistant to the general manager of sales and advertising.

New Appointments for Sperry's Marine Div.

New appointments at Sperry Gyroscope Company's Marine Division include J. W. Rinschler and T. J. Ford to assistant sales managers. Both men will report to division sales manager, W. R. Griswold.

New Integral V-Drive for Norseman Engines

Norseman Marine announces important additions to the famous line of Nordberg marine engines.

The popular 155 h.p. Knight and the 105 h.p. Bluefin are now available with built-in V-drive in conjunction with hydraulic reversing gears.

Each V-drive model is available with four gear ratios: direct drive, 1½ to 1, 2 to 1, and 3 to 1. This wide choice of gear ratios is available at no additional charge.

New Danforth Anchor

Danforth Anchors, already manufacturers and distributors of the world's largest line of anchors ranging from the 2½-pound to the 21,000-pound, have announced the addition of a new anchor to their line, the 130-pound Danforth Standard Anchor.

The 130-S fills the gap that formerly existed in the Standard line between the 85-S and the 180-S. Continuing public demand for an anchor in this size range led to the development of the 130-S by Danforth.

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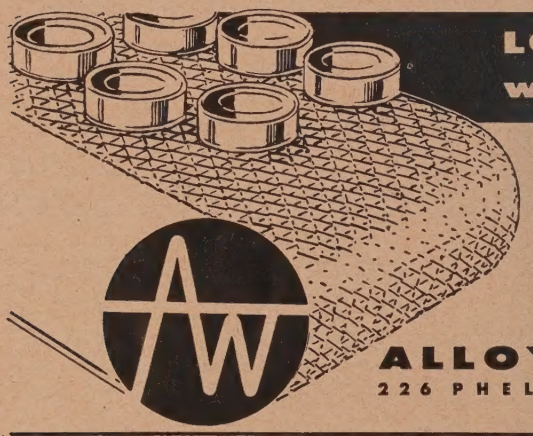

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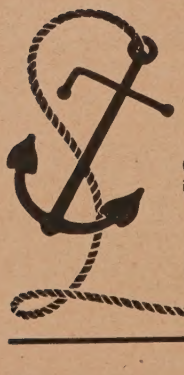

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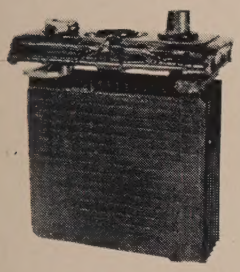
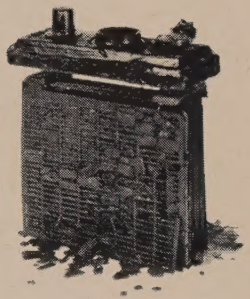
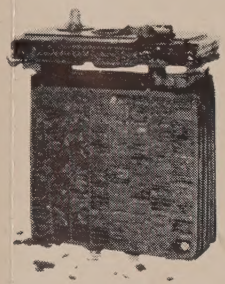
Here are actual results of a standard SAE overcharge life test—proof of the superiority of Exide® Marine Batteries. Silvium is a patented grid alloy used only in Exide Batteries. It's so corrosion resistant it prolongs battery life up to 100%, the test showed.



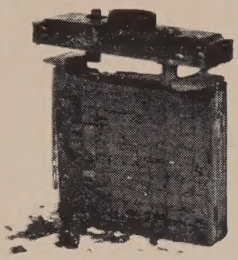
Exide Battery with Silvium



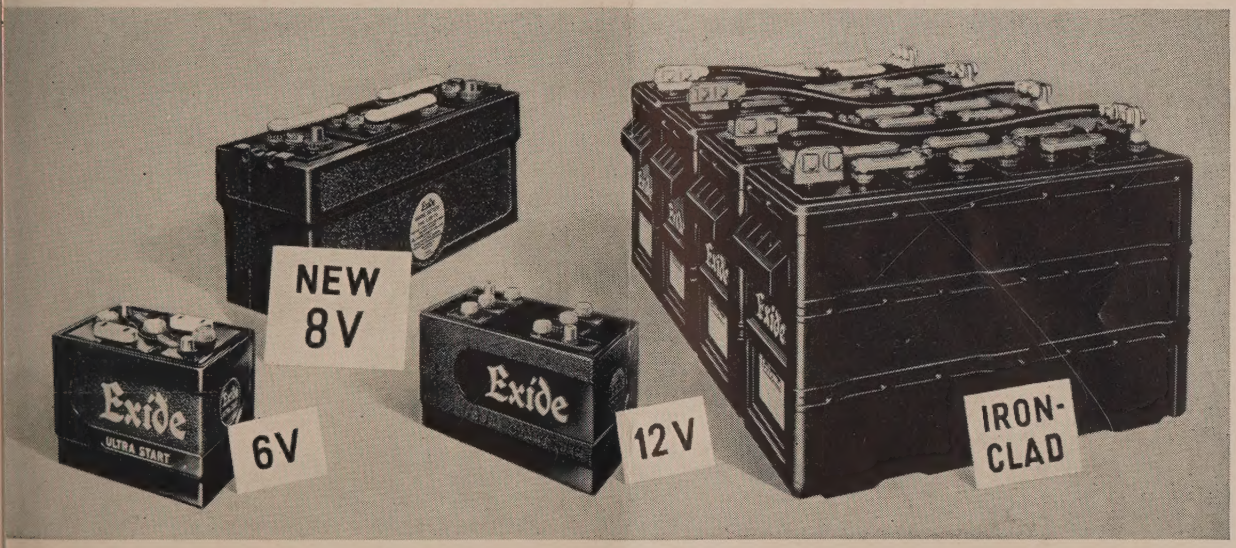
Battery A



Battery B



Battery C



What size boat do you own? You can get an Exide Battery with Silvium grids in a complete range of sizes. New 8-volt size is ideal for many boats with 32-volt systems. Exide-Ironclad is the best value for boats needing a heavy duty battery.

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